THE

Journal of the American Medical Association.

EDITED FOR THE ASSOCIATION BY N. S. DAVIS.

PUBLISHED WEEKLY.

Vol. X. CHICAGO, MARCH 3, 1888. No. 9.

ADDRESS

ON

THE PROGRESSIVE AND CONSERVATIVE SPIRIT IN MEDICAL SCIENCE.

The Annual Address Delivered before the Boston Gynæcological Society, December, 1887,

BY HORACE C. WHITE, M.D.,

OF SOMERVILLE, MASS.

In the broad domain of medical science there is room for many laborers; each may cultivate his chosen field for his own profit and for the general good. The historian records the discoveries and inventions of the past, relates the rise and overthrow of theories, and teaches us of the errors, as well as the truths, which have been promulgated. He that collates from reports and statistics furnishes sometimes important, and sometimes unreliable, data upon which to form opinions and theories.

The investigator, whether his researches are in the laboratory or by the sick bed, is often discovering new facts and frequently advancing new theories. These theories are put to the test and approved or condemned, by him who stands in the presence of disease and death, and who, furnished and equipped by the results of the labor of his predecessors, and his own experience, takes the responsibility to act. Knowledge is vast and life is short. Each in his own sphere may act his part.

The advanced thought of to-day is the conservatism of to-morrow. The winnowing sieve of experience separates the grains of truth from the chaff of error; the former is eternal, the latter is the rubbish of the past. The world is full of books, but a not very large volume would contain all well proven facts. The late Prof. Cleaveland, of Bowdoin College, gave as the best definition of science, "Classification and induction." One of his successors defines Natural Science as "that theory which will explain most of the phenomena."

The first definition is correct for exact science only, otherwise we may classify well proven facts, and those, often warped and twisted to prove theories which we have been taught, with what time proves to be but error. We must take the second definition to apply to Medical Science, if indeed it yet can be called a science.

Theories must frequently be changed with increasing knowledge. New facts, both physiological and pathological, require an almost continual readjustment, and often a radical change in theory.

The microscope is revealing hitherto hidden mysteries. Collateral sciences are developing unknown forces, and opening up new fields of investigation, while more scientific observation and careful recording of cases gives us much data upon which to revise long-unchallenged opinions. But not until we can comprehend that seeming impassable barrier, a want of knowledge of the vital force, or can get some conception of the origin and nature of force as applied in the natural sciences, can we expect to attain anything like permanence in our theories. Carlisle says: "Science has done much for us, but it is a poor science that would hide from us the great, deep, sacred infinitude of Nescience, whither we can never penetrate, on which all science swims as a mere superficial film." "The world," he says, and he might with equal truth have said the human body, "after all our science and sciences, is still a miracle, wonderful, inscrutable, magical and more, to whosoever will think of it." And yet each generation goes building up new theories and fortifying them with facts, both seeming and real, until its successors, or the advanced thinkers of the day, tear them down to build anew.

Against all these innovations stands conservatism, defending the theories of the past as a patriot defends home and country; and not only standing on the defensive, he sometimes attacks what he believes to be his enemy, with all the power at his command, using even sometimes the sharp sword of ridicule and sarcasm.

Have not these theories stood the crucial test of experience? True, they sometimes failed, but was not the failure merely an exception so conveniently believed necessary to prove the rule, or explained as an accident, which might have been avoided?

These well-tried theories he is loath to give up even when, in the light of new truths, another will explain more of the phenomena.

> "My very chains and I grew friends,
> So much a long communion tends
> To make us what we are."

The earnest seeker after truth should be both progressive and conservative.

This is an age of brilliant scientific investigation and dazzling theories, and while we should not be captivated by their mere brilliancy, we should give them an unprejudiced examination and an impartial judgment. Koch, Pasteur, and others, by their investigations and speculations in biological germs, have given a new impetus to scientific thought in its

relation to pathological processes. New theories have been founded and old theories threatened. Honest conservatism will not be hasty to accept the new, but it will be ready to listen, to examine, and to acknowledge that which time and experience prove.

All must acknowledge that the practice which has grown out of the germ theory so ably taught by Lister and his zealous disciples, has proved that scrupulous cleanliness is an essential factor to success in all surgical operations, and that when experience has eliminated some of the hasty conclusions, much of value will be left, and that many of the phenomena of pathological processes are best explained on these theories. Scientific thought is ever progressive. New theories are evolved from the old. "The originals," says Emerson, "are not original."

There should be nothing but generous contention between the progressive and conservative scientist. All new discoveries or innovations upon the customs or thought of the times are liable to encounter an ungrateful and often persecuting spirit. The torture of Galileo, the imprisonment of Columbus, the ridicule and misrepresentation with which the new discoveries of Harvey and Jenner were received by even the scientific men of their day, are only illustrations of the fact; nor can these examples be credited wholly to the ignorance or bigotry of the past; the same spirit often shows itself in some form at the present day.

Some of you gentlemen can remember the abuse heaped upon some of the most eminent surgeons of Boston when they first tested the anæsthetic virtue of sulphuric ether, and this severe criticism, too, by some of the leading medical journals of this country. For the benefit of younger members, I quote one of the many criticisms of that day:

The *Philadelphia Medical Examiner*, after detailing the reports of its trial by Drs. Warren Haywood and Bigelow, says: "We are persuaded that the surgeons of Philadelphia will not be seduced from the high professional path of duty into the quagmire of quackery by this will-o'-the-wisp; and, if any of our respectable dentists should be tempted to try this new patent medicine, we advise them to consider how great must be the influence of an agent over the nervous system, to render a person unconscious of pain—the danger there must necessarily be from such overpowering medication; and that if a fatal result should happen to one of their patients, what would be the effect upon their conscience, their reputation, and business, and how the practice would be likely to be viewed by a Philadelphia court and jury? We cannot close these remarks without again expressing our deep mortification and regret that the eminent men who have so long adorned the profession in Boston, should have consented for a moment to set so bad an example to their younger brothers as we conceive them to have done in this instance. If such things are to be sanctioned by the profession, there is little need of reform conventions, or any other efforts to elevate the professional character; physicians and quacks will soon constitute one fraternity."

How oddly this sounds when we remember the priceless boon to suffering humanity and the inestimable value to surgical science which the discovery of the anæsthetic virtues of sulphuric ether has been. Shall we not, then, take warning by the past, and, while we may be conservatively slow in accepting new theories or in attempting dangerous experiments, we should be equally careful not to hastily condemn every innovation upon the accepted theories and practices of the past, honestly seeking after truth and fearlessly defending it. The rapid growth of medical societies and their divisions into the various specialties, during the past few years, gives opportunity for full and frequent discussion on topics of interest to the profession. New and old theories must stand on their merits. Their disciples and defenders must at all times be ready to give a reason for their faith and defend it from assault; here each has a chance to question and demand proof, and each has an opportunity to prove, illustrate, and relate his experience. If it possess merit it will withstand all the arguments which can be brought against it, or all the ridicule which may be heaped upon it, and come out like wheat from the winnowing mill or new coins from the mint; but if it is wanting in merit it will soon take its own place among the heaps of useless rubbish with its kindred companions of exploded dogmas and worthless inventions. Such free discussions cannot but be of great value to true scientific knowledge if carried on with no feeling but that of generous contention and for disinterested purposes.

The past year has been a memorable one in its influence upon society work, and in the impulse which has been given to the scientific study of medicine in this country.

The meeting of the Ninth International Congress, at Washington, bringing together as it did eminent scientific men from different parts of the civilized world, each contributing by his presence, and many by their labors, to enrich the feast of medical scientific thought and fraternal relations. The amount of valuable original work was not small, and if, as Lowell says, "Originality consists quite as much in the power of using to purpose what it finds ready at hand, as in that of producing what is absolutely new," then the amount of original work was indeed vast as well as valuable. Not alone in the work there produced will the influence of the Congress be felt, but by the stimulation to investigation and study which will be felt, may we not hope, for many years to come. The Section of Gynecology was ably sustained, and the enthusiastic attendance upon its meetings proved the interest which was felt in this department of medical science. Much credit was due, and cordially awarded to, the President, Dr. Marcy, an honored member of our Society, whose indefatigable labor and eminent ability in organizing the Section, and whose courteous manner in presiding, did so much to deserve success. He was ably assisted by several other members of our Society, by many eminent gentlemen of this country and from abroad. Notably among those who were interested in this Section and whose acknowledged

rank in the profession in the countries which they represented gave great interest to their papers and discussions, were Drs. Martin, of Berlin, Grailly Hewitt, of London, Reed, of Glasgow, Apostoli, of Paris, and Cordes, of Geneva, with many others of first rank in this and other countries. With this array of talent so well organized, the meetings were interesting and profitable. Among the subjects discussed which have been considered by our Society with interest during the past year, was that of uterine myoma. Its treatment, in suitable cases, by ergot, was ably presented, as also by electricity, which called forth much discussion. Dr. Apostoli's method of using electricity in gynecology was fully explained and discussed. Dr. Martin's operation for vaginal total extirpation of the uterus for carcinoma, which several of you gentlemen had the pleasure of witnessing while he was in Boston, was elaborately explained and illustrated; but space will not permit me to give even a synopsis of what was presented of interest to our Society.

The Gynæcological Society of Boston can and ought to do efficient service in its important and honorable field of labor. Its talents are versatile, its spirit both progressive and conservative. It has in its membership ardent and enthusiastic investigators, men who do not feel obliged to stop where their predecessors did, or to take as proved all they have been taught, but who, with clear heads and steady nerves, are carefully exploring in untrodden paths by the light of advanced scientific thought and with all the appliances of modern art. It has also men with the experience of years upon them, men who have had grand success with old theories, and who have a right, by reason of their past success, to be conservative and hold fixed opinions. Some who have spent much time in the hospitals and laboratories studying their specialties with the best advantages and under the great masters of our art, and some who, although less favored, perhaps, in these respects, have been taught independence and self-reliance from necessity while treating all "the ills which flesh is heir to" in country practice where they were obliged to act with the best light they had and watch the results with no one to counsel them or share the great responsibilities, and some who have just entered upon the responsible duties for which they have been for years preparing themselves, full of enthusiasm and hope. Our Society is also honored by having in its membership, ladies, possessing not only the education and experience of the sterner sex, but also a keener sense of the wants and of the peculiar nature of the disease of which our specialty calls upon us to treat.

In our list of corresponding members may be found the names of gentlemen who are known the world over, and who are acknowledged as leaders in gynecological studies and practice. With this array of talent working harmoniously together, the possibilities of our Society for good to each member and the communities in which we live, are very great.

ORIGINAL ARTICLES.

UTERINE MOLES.

Read before the German Medical Society of Philadelphia, February 13, 1888.

BY EDWIN ROSENTHAL, M.D.,

ASSISTANT DEMONSTRATOR OF CHEMISTRY JEFFERSON MEDICAL COLLEGE; FORMERLY PHYSICIAN-ACCOUCHEUR TO THE WOMAN'S LYING-IN HOSPITAL OF PHILADELPHIA, ETC.

The most important of the internal organs of generation is the uterus. Its structure, anatomical character, physiological attributes and pathological changes have received the most attention from the zealous investigation not only of the obstetrician and gynecologist, but of the physiologist; and last, but not least, the pathologist. The peculiar and especial office that places it in the foremost rank of the anatomical structures in the woman is that of reproduction. After copulation, should fecundation take place, it then becomes the nest upon which the fecundated ovum rests, grows, matures, during that period which we term gestation, and at the expiration of this nearly uniform period it expels its contents: labor; and then resumes again its normal size and functions. These changes comprise a normal pregnancy, so familiar to you all.

But this evening I will speak of the pathology of pregnancy; that is, of one of the functional derangements that occur in the pregnant woman, in which there may be an accidental lesion of the ovum, spontaneous to the ovum, which always ends in death, and which we will designate as Molar Pregnancies.

I must, however, preface my remarks with this observation: that whilst there are certain forms of moles termed the false or spurious moles, which have nothing at all to do with conception and which, for the proper understanding of our subject, must be spoken of and described, I may be open to your criticism by speaking of these affections under the term pregnancy; but as I before observed that the uterus expels its contents by what we term labor, and as labor is the ultimate result of pregnancy, the expulsion of a spurious mole has the same physiological action as that of the true mole, probably and properly termed a spurious pregnancy; at any rate, the women suffer pain quite equal, and a virgin will remain a virgin, a mole notwithstanding.

Historical Sketch.—Moles were known to the earliest writers. This can be attested by the fact that Hippocrates, Aristoteles and Galenus had been acquainted with them; speaking of them and understanding them to be degenerated ova, which we to-day know as vesicular or fleshy moles. The Arabians gave a greater field to their designation of moles. They understood a mole to be not only the uterine contents, but also any tumor which might lay in the cavity or in its walls. Then again, at a later period, a difference was shown in moles, and then was spoken of true and false moles; the product of conception and not of conception.

Schenk v. Grafenberg, in 1565, was the first to describe the vesicular or hydatidiform mole (Blasenmole). The nature of this product was for the great-

est period obscure. From the end of the last century even until a recent period this was looked upon as true vesicular worms. Whilst already Ruysch (who was still uncertain whether they were a pathological product of pregnancy), looked upon these cysts as an alteration of the villi. Velpeau and Johan Müller disputed that the vesicles were true cysts. The problem: from whence originated this growth? was unsatisfactorily answered by different theories. Gierse and Meckel seek the origin of the product to be a hypertrophy of the villi (zotten); whilst H. Müller the exochorion, and Mettenheimer the cellular tissue. Virchow finally cleared away the obscurity and brought light on this subject. He proved that vesicular or hydatidiform moles (described also by Hildebrandt as "fibrous myxomata" of the placenta) were a hyperplasia of the mucous membrane—the elementary bases of the finer tufts of the chorion (Chorionzotten). Schroeder quotes cases of "diffuse myxoma" of the placenta, by Breslau and Eberth, and Spaeth and Wedl.

Moles and their Synonyms.—Obstetricians divide moles into two great classes: *a*, the false; *b*, the true moles.

True moles are subdivided, as regards their physical character, into fleshy and vesicular or hydatidiform. The fleshy are again divided into fatty, carneous (steinmole), etc. Moles have been designated by different names: moon-calf (Mondkalb); devil's brood (Teufelsbrut); wind-egg (Windei); sun child (Sonnenkind); Neirenkind, Kielpopf, Missgeburt, etc. By the professional they are designated by their contents: blood mole (Blutmolen); water mole (Wassermolen); air moles (Luftmolen); hair mole (Haarmolen); cartilaginous mole (Flechsenmolen); bone mole (Knochenmolen); and calcareous mole (Kalkmolen).

A. Spurious Moles.—I shall speak rather briefly of this portion of my paper. As an independent affection, existing uncomplicated, I believe it to be impossible. Its mention here is to open the way for the discussion of the more important variety.

Mauriceau believes that moles could not exist without impregnation; that it was always the offspring of intercourse. In his 105th aphorism (Traité des Maladies des Femmes Grosses) he says: "Les femmes n'engendrent jamais des moles, si elles n'ont usé du coit." This Alexander Milne, of Edinburgh, cannot subscribe to, believing that cases occur; nay, more, having met with them, where fleshy masses have been expelled from the uteri of women who certainly never had connection. If virgins expel such things, then, they are not to be impeached; to do so would be unjust.

Various substances, organized or unorganized, may be discharged from the uterus of the virgin; such substances as clots of blood, membranous shreds, or even whole membranes, as well as fibrinous materials. These may even have the shape of the uterine cavity, and may come away naturally or must be removed; and which have nothing whatever to do with fecundation, and are termed spurious moles.

Their significance is of some importance from a medico-legal view, and the utmost care should be exercised in differentiating these false moles from true ones. Difficulty may arise when the discharged tissue is the membranes of membranous dysmenorrhœa, where this tissue may be mistaken for true decidual membranes. The circumstances attending each case should receive the earnest scrutiny of the attending physician. All circumstantial and direct evidence should be gathered: were there any previous attacks? note the absence of the signs or symptoms of pregnancy, and so on. Examine the discharged mass; should this happen to be complete, we may find the opening of the Fallopian tubes and that of the cervix, which is never observed in true decidua. The microscope, however, will determine the presence or absence of the fecundated ovum. Blood clots, polypi, and small fibroids or portions of large ones should not be difficult of recognition by naked eye or microscopic examination.

B. True Moles.—True moles are always the result of impregnation. The villi of the chorion may become distended with fluid collecting within them, causing them to swell and assume the form of rounded vesicles comparable to gooseberries or grapes, resembling hydatid vesicles, and on account of this analogy they were for a long time supposed to be true hydatids. Or an extravasation of blood may take place between the maternal and fœtal structure of the fecundated ovum or into the tissue of the latter, producing a fleshy mole. The embryo may become mummified, or may speedily disappear in the early stages, and then we meet only with the membranes or appendages.

Two chief varieties of true moles are at present recognized, namely: 1, the fleshy; and 2, the vesicular or hydatidiform mole.

1. Fleshy Moles.—These I believe to be the most frequent. My colleagues who are acquainted with this formation and myself have met with these cases more frequently than the hydatidiform. I shall present the histories of a number of cases which I have met in practice and in that of my colleague, Dr. L. Wolff, which may describe the conditions met with:

Case 1.—Dr. Wolff's case. History incomplete. The doctor was called to a woman in absence of her regular medical attendant. She was suffering from uterine hæmorrhage. Besides this, she had painful uterine contractions. The flooding was very profuse. On examination a roundish mass was discovered engaged in the os tensi. Tamponnage and internal administration of ergot failed to remove this, although it gave rise to violent contractions. Expulsive efforts were much marked, but with no result. Dr. A., for whom Dr. Wolff was attending, returned in a few days, and afterwards informed him that the case was one of a fleshy mole, firmly adherent to the uterine fundus, which he had to detach with a blunt hook and curette.

Case 2.—Dr. Wolff's case. A German woman. History of general good health; no syphilitic or other taint. Previously treated by my preceptor, Dr. Julius Kaemmerer, who treated her for several of the kind before. They were spontaneously detached after much hæmorrhage. Dr. Wolff treated the same case with precisely the same symptoms:

previous suppression of the menstruation of two or three months, beginning hæmorrhage and pain, becoming worse as the case continued; the mass coming away naturally.

Case 3.—Dr. Wolff's case. A German woman, strong and healthy appearance, æt. 30 years. Had been complaining of uterine pains, bearing-down pains, for some time, with slight hæmorrhage which became very profuse, for which Dr. Wolff was sent for. The uterine contractions were much greater than he had previously met with. Digital examination revealed a round, soft body engaged in the os tensi; it was firmly adherent and could not be removed between the fingers. Tampon and ergot had no effect, though frequently repeated. As the hæmorrhage continued so profusely as to endanger life, removal was proposed and consented to. This was accomplished by means of the Beecher placenta forceps after considerable difficulty, the adhesions being so firm, and effected only after twisting or rotating the mass. The adherent or pedicular portions were found quite distinct, and had undergone partially but distinct fatty degeneration.

Case 4.—Dr. Wolff's case. Mrs. C., an Italian woman with a history of a number of miscarriages. Was attended by Dr. H., who called Dr. Wolff in consultation. The doctor found the patient almost pulseless. Dr. H. was not there when the doctor arrived. He had, however, succeeded in controlling the hæmorrhage by means of the tampon and ergot. Stimulants were administered and twenty-four hours subsequently the tampon was removed by Dr. H., who insisted that the case was one of miscarriage only, and predicted that the placental residue would be found in the vagina after removal. As no fœtus had been expelled, and no history of fecundation, Dr. Wolff claimed the probability of its being a mole. Tampons failed to dislodge it, both in the first attempt or any repetition, therefore removal was consented to, and with the Beecher forceps a fleshy mole was removed, part of which had been previously broken up and removed by Dr. H. After removing all particles with the blunt hook and curette and irrigation with hot water, the hæmorrhage ceased, the uterus contracted, and a slow convalescence ensued from the extreme anæmic condition.

Case 5.—Mrs. N., æt. 35, had never borne children. Was called to see her for intense uterine pains with slight hæmorrhage. She had suppression of the menses of ten weeks' duration. Morphia was administered hypodermatically. On the third day hæmorrhage became more profuse, tamponnage and ergot were resorted to, which caused the expulsion of a flesh mole the size of an orange, round and somewhat firm, presenting an irregular surface covered with coagulated blood. When incised, the texture was somewhat compact, and in the centre was found a small cavity, lined by a serous membrane and containing a small quantity of fluid. Not a vestige of either the fœtus or cord remaining. She made a rapid recovery.

Case 6.—I was called by a midwife to see a Hungarian woman who was supposed to be laboring under a beginning miscarriage. She appeared to be about 40 years of age, well nourished and fleshy. She had been in labor about twenty-four hours, and the midwife was at a loss what was presenting, which was shared by myself. There was a slight hæmorrhage, with uterine contractions. The uterus was open about the size of a dollar, soft and pliable, and a tendency to dilate. In several hours a large fleshy mass was discharged, about the size of a fœtal head, which presented the same physical characteristics as the previous case, except in the walls of the mole, which were probably 3 inches in thickness; small cavities were found filled with blood. In its centre the same cavity as in the previous case was found (which, in regard to proportion to the entire mass, might be placed as 1 to 20), lined with serous membrane and containing some fluid and nothing more.

Case 7.—A Polish woman, Mrs. H., æt. 38, mother of five children, the youngest 3 years. Had had three miscarriages, but none since the last birth. Had suppression of the menses for over a year and supposed herself to be passing the menopause. For four months has had constant dribbling of blood from the uterus with intermittent pain. I was called to see her, and on examination could easily pass my finger into the uterus. Presenting at the os, and movable, I found a mass of tissue. This I attempted to remove with curette and blunt hook, but without success. By means of this placental forceps I was enabled to remove the mass, previously crushing it so as to remove it. It was a mole, probably one of those termed the carneous, of very dense fibrous tissue, with here and there small pellicles of calcareous deposits. The woman made an excellent recovery.

Case 8.—B. F., an English woman, æt. 33 years; well nourished; family history good. Has had four miscarriages, and then one pair twins; one year after gave premature birth to twins, both dead, probably seven month fœtuses. A year after this I was in attendance and she was safely delivered of a full term child, and with the afterbirth, seeming to be adherent, was discharged a large fleshy mass, having all the characteristics of a fleshy mole. Its size was that of an adult head; it was pliable, easily moulded, and was brought away without any difficulty. I mistook it at first for a monstrosity, but it had no resemblance in any of its features. I incised it and found a small cavity containing a small amount of fluid. This case was unique, and I might have doubted that the mass as a fleshy mole could exist with the living fœtus, but since then I have read in an excellent monograph by Alfred Wiltshire, Physician-Accoucheur to St. Mary's Hospital, London, that such a state of things was said to have occurred on the occasion of the birth of the celebrated anatomist Beclard. That, in fact, twin pregnancies may occur where degeneration affects the membrane of but one ovum.

ETIOLOGY.—As before mentioned, extravasation of the blood between the maternal and fœtal structures of the fecundated ovum, or into the tissues of the latter, appears to be the active agent in the production of the fleshy mole, though it is difficult to determine the agencies whereby this condition is brought about. Diseased state of the decidua may doubtless result when pregnancy supervenes upon chronic en-

dometritis. In a case I treated wherein pregnancy supervened, a miscarriage resulted. I did not examine then, which probably I would do now, the products of this miscarriage. It is said that an effusion of blood into the maternal structures may occur from cardiac disease; though my experience teaches me that women suffering from cardiac diseases very rarely become pregnant.

Frequency.—From the number of cases presented this evening it may appear that moles of the fleshy variety are not infrequent. I am led to think that they are more frequent than one supposes. The lack of knowledge, coupled with the ridiculous faith placed in the assertions of the women who have them, leads the attendant astray. Again, their appearance, likened to that of placental tissue, especially when blood is effused into it, besides where the mummified fœtus is still in existence, or the remains of the fœtus, of the cord, etc., leads the physician to a diagnosis of a simple miscarriage and not that of a molar pregnancy. Fleshy moles are by far more frequent than the vesicular or hydatidiform variety, and are not an uncommon concomitant to frequent pregnancies or miscarriages.

SYMPTOMS.—The immediate symptoms are those of a threatening miscarriage. The premonitory symptoms are likened to those of the very earliest months of pregnancy. Absence of the placental souffle and the positive signs of pregnancy, with suppression of the menses, are among the signs. I and my colleague were only called at the threatening abortion. I do not believe that any positive symptoms exist by which accurate diagnosis can be made previous to its expulsion.

Course.—The course of the molar pregnancy of the fleshy variety is variable. Generally at three months nature seeks to throw off the mass. Hæmorrhage comes on about this period, and then it is simply a question of time when the uterus expels its contents.

DIAGNOSIS.—The diagnosis of the fleshy mole I should deem impossible. Suspicion may arise when the patient has had one before, but as regards positiveness, I think it out of question. It can only be made when you have the tumor in your hand.

PROGNOSIS.—All the cases here quoted ended favorably. Prompt treatment should be the rule. Should danger arise from the excessive hæmorrhage, the tampon is always a safe and efficient remedy. Some cases of extra-uterine moles which authorities quote, that have been met with in the ovary and abdomen, and the cyst given way, causing death, are of course unfavorable. Sometimes these cysts have opened into the bladder or bowels; the result being the same. Still, the same chances which extra-uterine pregnancies have in antiseptic surgery extra-uterine moles may have; and the prognosis modified. These cases are, happily, most rare. Wilton (*Lancet*, February, 1840) relates one case. Peritonitis may result from the misuse of instruments, causing death. Hæmorrhage might, and pyæmia and septicæmia, etc., may cause death.

PATHOLOGY.—The pathology of fleshy moles is still shrouded in obscurity. Heart disease, causing an effusion of blood; again, syphilis and other blood dyscrasiæ, appear to exert an influence, and perhaps the same may be said of acute specific diseases where they fail to excite abortion. Whatever may be the exciting cause, when once blood has been effused into or between the fœtal and maternal structures, the vitality of the embryo is speedily compromised. The common result is abortion; but, should not the whole be thrown off, growth may take place in the remaining tissue; while the effused blood becomes organized and gives bulk to the mole. In a case of cancer of the ovary, posted by a friend, I removed some time previous what I termed a retained placenta, which was in the uterus of that unfortunate woman five months.

The maternal placenta is formed by the decidua serotina. The fœtal placenta is formed by the villi of the chorion, which, having originally covered the entire surface of the ovum, atrophy over the major part of the surface, while they ramify and develop, *ad infinitum*, at the point corresponding to the serotina, where they become imbedded and constitute the vascular mass known as the placenta. To study changes in the chorion amounts to studying the lesions of the placenta, and the reverse. Now, these changes may relate to each of the placental elements, *i. e.*, the vessels and the villi.

Not infrequently a considerable effusion of blood takes place immediately beneath the amnion, encroaching greatly upon and sometimes rupturing the amniotic sac, and Cazeau (1876, page 578) gives his description of a fleshy mole as follows: "It may further happen that the placenta, maintaining its vascular adhesion with the internal surface of the organ, continues to develop after the child's death, the cord and fœtus becoming atrophied, and then completely destroyed; or, indeed, the ovum may rupture, and the little product escape, leaving the membranes behind. These envelopes may undergo various modifications, but the most common is the morbid product known as a fleshy mole." The inner aspect of the cavity then presents an irregular nodular appearance, and is of deep red, almost black color. When the nodules are incised they are seen to be composed of firm blood clot. The fœtal surface contains numerous blood cysts. The tissue microscopically I present here.

If not immediately thrown off, growth may continue in the tissues, and a bulky fleshy mole results. The connection between the ovum and the womb being most intimate at the placental site, changes go on most actively at that spot, and when blood is largely effused here it constitutes what is called apoplexy of the ovum. Examination of the carneous moles shows the decidua vera to be the chief seat of degenerative changes; but in all cases chorion villi may be found, though much altered by fatty and molecular matter. Fatty degeneration may be extremely marked, and in rare cases calcareous degeneration may be met with, forming what the Germans term the Steinmole; but such degeneration of other uterine bodies may occur, as fibroids, etc., and therefore clear evidence of conception should exist before it is looked upon as a true mole. Blood polypi are

occasionally met with, arising after miscarriage or delivery at full term, in which, organization having taken place and communication being established between the clot and the uterus, degenerative changes go on to the extent of calcification, whereby the so-called Steinmole may be produced.

2. *Vesicular Mole.*—The vesicular, hydatid or hydatidiform mole is the better understood, if not the more important variety of the true mole, and has received the most attention of the pathologist. I have seen it but three times, twice in one person. I will relate the cases here.

Case 1.—Mrs. S., an American lady, æt. 28 years, brunette, a little above the middle size; well nourished; had one child, æt. 5 years; and two miscarriages, one of which was twins, I attended her in both. I was engaged to attend her for what we both thought a normal pregnancy. She could not tell me how long she had been pregnant, but from indication I judged her to be about six months. Her family history is good. I have some doubts as regards her husband's morals though I have never treated him. She sent for me on account of a show. I made no examination, but treated accordingly. She increased rapidly in size, at the same time the dribbling of blood continued, and she says, she felt not at all like carrying her first child, and therefore feared that all was not right. She was confined to her bed and probably a month later I was again sent for; she having at my former visit requested me to wait until I was sent for. I saw her very anæmic, having constantly lost blood and small masses, which she told me were blood clots. Examining the abdomen by inspection and palpation revealed a boggy sensation, the abdomen had the same appearance as in dropsy; the uterus was not at all conical but seemed transversely more wide.

Digital examination revealed a protruding mass through the os, and withdrawal brought away numerous vesicles. The diagnosis of vesicular mole being explained, permission was freely granted to remove the mass, which was with some difficulty accomplished. The patient making a very slow and tedious convalescence.

Case 2.—Mrs. L., present age 42 years; at my attendance six years ago 36 years. A Russian woman, well nourished; at the present time she has given birth to thirteen living children, the oldest 23 years, the youngest 18 months; eight are still alive. She has had two living children since my attendance in 1882. She was married at the age of 15. Her husband has perfect health as regards specific diseases. When I attended her in 1882, I was called for a hæmorrhage from the uterus. This was very profuse. On examination I found a large mass filling up the whole vagina and protruding externally, which I at first mistook for a blood-clot. The tissues of the mass were easily torn in attempting removal, which was accomplished with great difficulty. The mass I removed by scooping out the tissues with my fingers, and a large quantity was thus removed. I irrigated the uterus and vagina with vinegar and water injections. Three or four days after my patient mysteriously disappeared, having forgotten to pay me, and I never saw her again until three months ago, when she brought her youngest child to the Jefferson Hospital for treatment and our recognition was mutual. She complained of some uterine trouble, and I referred her to the Women's department. Five days afterwards I was sent for.

She was in bed; complained of slight pain and hæmorrhage, and I gleaned the following history: Since I removed the previous mole in 1882, she had been in good health, and had given birth to two living children, the youngest was 16 months old. Since then her health has been variable, and for the last five months she had constantly a uterine hæmorrhage, intermittent in character. For this she sought treatment at the hospital, and since then has had pain of variable intensity whilst the slight hæmorrhage ceased, to give place to more copious hæmorrhage for which I was sent for. On examination I found the vagina filled with a mass of tissue and blood-clots, part of which I removed at once and have here in this jar. The next day removal of other portions was undertaken, but with great difficulty; the parts being torn in the attempt. Ergot and tamponnage with irrigations and curetting, enabled me in about ten days to remove the whole of the uterine contents.

My patient is making a very slow and tedious recovery and is still under treatment for symptoms of sub-involution.

Etiology.—Like fleshy moles, the etiology has not been fully explained. We are still not assured whether the cause of this variety is primarily in the ovum, or in the diseased deciduæ, or if it originates from the maternal cause—the blood of the mother. Ruysch, Scanzoni, and Graily Hewitt, find it in the death of the fœtus; but moles have been found with living children. It is not the death of the ovum alone that can be directly the cause even if a neoplasm should ensue after such a death. That the cause may lie with the mother we have such cases on record in which the deciduæ is diseased, or other pathological affections of the uterus exist, and where moles are found more than once in the same woman. Virchow attributes it to endometritis, and this is the generally received opinion in Germany to-day. Virchow, Mayer, Depaul, Harkin, Puech and Hecker think that in the formation of the allantois is the origin of the anomaly, as we find cystic or vesicular or hydatidiform formation in the placenta or in the villi of the chorion. This may be reasonable to suppose the reason that one ovum may degenerate into a mole whilst the other may be perfectly normal. Charpentier, (Vol. V. p. 253, Ency. Obstet. and Gynæcol.) says: "It is probable that the myxomatous lesions begin in the abundant mucoid tissue of the villosities, and that this tissue becomes infiltrated with fluid.

Frequency.—Vesicular moles are rare, though partial degeneration of placental tissue may make it more frequent. It is found oftenest in multipara of 25 to 40 years. A molar pregnancy is apparently, to a certain extent, a predisposing cause. In some instances vesicular moles repeat themselves more than once in the same woman, sometimes after pregnancies, sometimes during pregnancies. Meyer (Virchow's Archiv. 1870, Bd. 41, p. 461) relates a case where a woman eleven times carried a mole

and at the same time a full-term child. Depaul—in the same journal—relates a case wherein a woman had a mole three successive times. Bloch (Jas. Blasenmole, Freiburg, 1869) says: "Women of advanced age show a greater tendency or disposition to moles. First pregnancies are rarely so affected. One pregnancy quickly following another point to a predisposing cause to molar pregnancies.

SYMPTOMS.—In the beginning are rarely marked. The same symptoms as of ordinary pregnancy are those most usually found. The bulk of the uterus increases with great and disproportionate rapidity. There is a tendency to the loss of ovoid form and the assumption of the globular or more transversely wide shape. Generally there is evidence of some derangement, by the appearance of a watery and sanguineous discharge, later on small vesicles come away, and then the diagnosis is clear, but in their absence diagnosis is guarded. According to Percy, there is an alternation of small hæmorrhagic and watery flows, commencing in most women at the second month, and continuing at longer or shorter intervals until parturition. Gardien observes that the expulsion of hydatids is usually accompanied by hæmorrhage and syncopes, and Depaul has observed the same peculiarity. This mole can reach the size of a child's head and weigh 1000 to 1500 gms. or more.

Physical examination often yields important information. Palpation may give, as Leishman remarks, a significant sensation of bogginess, with absence of the irregular fœtal hardness. Hardening under manipulation is very significant of the uterine nature of the tumor. On examination, a doughy sensation may be experienced in the lower segment of the uterus. Should the os be open, vesicles may be felt. To the touch they somewhat resemble recent blood-clots.

Course.—From three to four months uterine contractions set in with pain, discharge of blood, serum, mucus, etc., vesicles come away and the mass is slowly discharged. It is a very tedious process, as it is a rarity for the mass to be discharged *in toto*. Generally it is discharged in pieces and the woman suffers greatly from loss of blood, shock, etc. As a rule, the whole course of this disease is from three to six months (Kleinwächter) though cases are on record where its course was prolonged to nine or ten months, or longer even than normal pregnancy. Underhill (Amer. Jour. of Obstet., 1879, p. 182) relates a case of molar pregnancy which lasted one year. It is a rare thing for a normal and molar pregnancy to take place at the same time. As an exception Caspari relates (in Virchow's Archiv. Abgang der Mole in der 20 Woche and 3 Tage später jener einer 4 monatlichen faultodted Frucht) a case in which a mole was discharged and three days later the fœtus in a state of putrefaction.

DIAGNOSIS.—The diagnosis at the beginning of the disease is impossible. If the uterus enlarges too rapidly, that is disproportionate to the time; vesicular moles may be suspected. When mucus, blood, and above all, vesicles are discharged, then the diagnosis is assured. The older authors did not consider the mole as always due to pregnancy, and claimed that the mammæ did not develop. That is not the case, for Cartereau has demonstrated the abundant presence of milk. They said the mother did not feel life; but there are moles where the child is born living and at term. Finally, the uterus shows the ordinary inequalities, and all the signs of pregnancy: nausea, vomiting, etc., may be present.

PROGNOSIS.—For the mother is always grave. The source of danger is the frequency and intensity of the hæmorrhage. In many cases the mother succumbs, not from development of the mole, but from hæmorrhage. The only instance where death could be attributed directly to the mole is that of rupture of the uterus mentioned by Madame Boivin. The hæmorrhages are usually moderate at first, and usually only become serious towards the end of pregnancy, and at the moment of expulsion. If a physician is in attendance the prognosis is more favorable than when such pregnancies are left to themselves. In some cases the vesicles are retained so closely to the uterine wall that it is with difficulty they can be dislodged, care should be taken in removing them; again, if the tumor be of extraordinary size, the prognosis should be guarded. As a rule, we should look with significance upon the size of the mole, the partial or total extraction, and the intensity of the hæmorrhage, before we give an opinion. In those instances where women have had several vesicular moles, the prognosis is more favorable.

For the child the prognosis is always serious. If the fœtus be not liquefied or dead, it is always injured and ailing, and ill-prepared for life.

PATHOLOGY.—It is well to state at the onset that the name "hydatid" mole is erroneous and misleading. There are no true hydatids or echinococci in it; the physical arrangement of the vesicles is different. True hydatids are closed sacs, contained one within another, while the vesicular mole is formed by saccules growing from one another. It was formerly supposed that they grew from a common stalk, and they were likened to a bunch of grapes or currants; but for the reason given above the simile was imperfect.

The vesicles vary in size from a chestnut to a pin's head or less; usually they are about the size of small currants, and as a few may from time to time escape accompanied by more or less sanguineous discharge, Gooch's simile of "white currants floating in red currant juice," is a very apt one.

Dubois and Desormeaux describe three varieties of hydatidform moles. 1. The embryonal hydatid mole. 2. The hollow hydatid mole. 3. The hydatid mole *en masse*.

The *first* variety consisting of a membrane, vesicular on its outer surface, with an internal cavity containing a fœtus or parts of one, and possibly fluid.

The *second* kind is like the first, save that its cavity contains only fluid, and possibly a remnant of the umbilical cord, the fœtus having been dissolved.

The *third* variety is distinguished by the enormous development of the hydatid bodies, and the more or less complete effacement of the central cavity formed by the amnion, the place of which is taken by a mass of soft, yellowish, spongy tissue.

Moles of all kinds are covered by a thick membrane, which is in immediate contact with the uterus, and which is nothing but the decidua. It has been carefully investigated by Robin, Barnes, Mettenheimer, Paget, Hewitt and others. According to Cazeau, M. Velpeau was the first to discover that the hydatidiform mole has its origin in the chorion, and the microscopical examinations of Prof. Robin exhibited still more clearly the true nature of the disease by showing that the envelope of the vesicles have all the anatomical characteristics of the walls of the villi of the chorion. They become dropsical, swell up, the pedicle of these dropsical villi is formed of the base of the villus affected. Gooch likened them to currants, Cruveilhier to grapes. These specimens show both. Mettenheimer thinks that on the outer surface of the little cysts, formed by the transformation of the cells of the villi, a new growth of villi arises, and that these again are morbidly altered into similar cysts, and so on. Dr. Grailly Hewitt (London Obstet. Soc. Transac., vol. 1, p. 249) says there is no new formation at all.

All authorities agree that the vesicles grow from the chorionic villi. There is no new formation, but excessive and erratic development. Mettenheimer, Paget, Barnes, Virchow and others, concur in this view. Whether the change is the cause or the consequence of the death of the embryo is unsettled. It may be some innate morbid condition of the ovum, or some acquired defect. Dr. Hewitt thinks that the starting point of the abnormality is the death of the fœtus rather than this latter is the result of the degeneration.

Leishman points out that the period within which degeneration of the chorion villi may originate does not extend probably beyond the tenth week, that being the period of greatest activity in the growth and multiplication of the villi. Later on when blood vessels have occupied the bulk of the villi this kind of degeneration seems incapable of formation. The probabilities therefore are in favor of the formation taking place in the first chorion or vitelline membrane.

Normally, only those villi that correspond to the placenta develop progressively; but if a pathological condition supervenes very early in pregnancy, they all proliferate and become hyperplastic. Abortion usually follows, but it may happen that the placenta develops normally, only a certain group of villi becoming hydatid. Usually, however, the affection is situated just at the placental site, though only a portion of the cotyledons may be affected.

In any case the affection begins as a multiplication of nuclei and cells.

Whether simple hyperplasia or a hydatid state results, it is very common to find the isolated vesiculated cells which Virchow has designated physaliphores. They are found in the epithelium as well as in the parenchyma of the villi, but they have no relation to the development of the vesicular mole. The morbid process corresponds to that described as the mucoid degeneration of cells. Virchow does not deny that some cells may disappear, or may undergo a fatty change, but they often persist in great numbers, and the principal accumulation is relatively large, the tissue becomes cystic in appearance. Where the fibrinous portions are in excess, a simple hyperplasia results.

Thus these tumors are formed. A villus whose normal diameter may be hardly half a line, may be dilated to half an inch or more. The larger they get the more characteristic they become of mucoid tissue. They become clear, transparent, and gelatiniform. They contain a ropy liquid which gives the reactions of mucin.

The vesicular appearance depends upon the delicacy of the liquid-filled tissue.

This development has nothing to do with the vessels, but if it occurs late in pregnancy, the vesicles may become the seat of an extremely rich capillary plexus. But vessels are usually absent, at least in eggs coming from the first month; and dropsy of the amnion and atrophy and death of the fœtus occurs in consequence of the disease which cuts off the circulation (Charpentier). Hence, the different descriptions given by authors, and the three kinds of hydatid mole; they are only degrees of one and the same lesion, varying from a simple faulty conformation to complete destruction of the fœtus and the cord.

The theories concerning the vesicular mole may be summed up as Duchamp says, in the following propositions: 1. The vesicular mole is entirely independent of pregnancy. 2. The vesicular mole increases under the influence of pregnancy, but is not due to a disease of the egg. 3. The vesicular mole is due to a change in the product of conception, from *a.* alteration of the vascular wall (Cruveilhier); *b.* alteration of the lymphatic vessels; *c.* dropsy of the chorinal villi (Robin, Cayla); *d.* Myxomatous degeneration (Virchow and the Germans, Ercolani, Damaschino, Cornil, Ranvier, Hirtzmann, 1874, Josephson, 1879). Of these the theory of Virchow is the accepted one, for the following reasons: 1. The normal villus contains mucoid tissue; it is not astonishing that it should hypertrophy. 2. The vesicular fluid contains mucin. According to Gscheidlen, it is composed of chloride of sodium, 3.34, phosphoric acid, 0.74, albumin, 6.12, mucin, 2.94, salts, 6.25.

Cases are on record in which a repetition follow each other in the one case, Dr. McClintock mentioned this several years ago. Again in some cases a cotyledon of the placenta may undergo such a change and the child be born at maturity alive, but generally it is carried until labor and then delivered dead. Such cases are recorded by Hunter (*Lancet*, 1846, p. 434, vol. 1), Krueger, Virchow (*Krankhafte Geschwülste*, Bd. 1, p. 405), Martin, Conche et Totan, Breus, etc. Vesicular mole can also be carried at the same time with a healthy child, as a twin which is born alive (Viaidel, Boivin, etc.), and again there may be extra- as well as intra-uterine moles, as well as double extra-uterine molar pregnancy described by Jakobson (U. H. f. G. u. f. Bb 13, p. 122).

Barnes relates a case in which the vesicular mole was so intimately connected with the walls of the uterus that the vesicles penetrated the wall even to the peritoneum.

Schrœder refers to a case by Volkmann, and one

by Jarotsky and Waldeyer in which this occurred.

The vesicular mole belongs to a class of pathological products known as myxomata. (Virchow, Cornil, Ranvier, Malassez and de Sinéty, have demonstrated the identity of the vesicular mole with myxomata of other regions.

An analogous degeneration of the placenta has been described by Virchow and Hildebrandt as "fibrous-myxoma" of the placenta. Schrœder quotes cases of "diffuse myxoma" of the placenta by Breslau, Eberth, Spaeth and Wedl.

A case of myxoma, or hyperplasia of the choronic villi, is related by Dr. Sinclair, in Vol. 1, of the Publications of the Massachusetts Medical Society.

Different synonyms are: Hydatid, or vesicular mole; cystic degeneration of the chorion and placenta; dropsy of chorional villi; myxoma of the placenta.

TIME OF THE FIRST HÆMORRHAGE AND ITS DURATION IN HYDATID GESTATION.

Names of Authors.	Time of 1st Hæmorrhage.	Time of Delivery.	Duration of Flow.
Dumaurceau,	45 days	8 months	6½ months.
Mme. Boivin,	45 "	4 "	3½ "
Littre,	2 mos.	6 "	4 "
Crowfort,	3 "	7 "	4 "
Louville,	3 "	7 "	4 "
Percy,	3 "	8 "	5 "
Mme. Boivin,	3½ "	8 "	4½ "
Pichart,	4 "	4 "	
Millot,	4 "	4 "	
Delamotte,	5 "	5½ "	15 days.
Percy,	6 "	9 "	3 months.
Bremser,	7 "	8 "	1 "
Jolly,	8 "	10 "	2 "
Bandelocque,	11 "	11 "	
"	16 "	14 "	
Rosenthal,	6 "	7 "	1 "
"		4 "	
"	11 "	16 "	5 "

DURATION OF HYDATID GESTATION. OBSERVATION IN CASES.

Women delivered	at 14 months,		1 case.
" "	11 "		1 "
" "	10 "		3 "
" "	9 "		3 "
" "	8 "		4 "
" "	7 "	8 dys.	1 "
" "	7 "		1 "
" "	6 "		5 "
" "	5½ "		2 "
" "	4 "		3 "
" "	3 "		4 "
	Total,.....		28 Cases.

TREATMENT.—The treatment of all forms of molar pregnancies consists in the complete removal, whenever practical, of all the diseased tissue. The special treatment is of the hæmorrhage. General measures and expectant treatment if slight; tamponning if it be severe. The expulsion of a few vesicles during the pregnancy does not affect the treatment. It is a common thing to recommend oxytocics, preferably ergot, but if this fails to insure the expulsion of the mass, recoure must be had to other methods. We can scoop out all we can reach with our hands, this implies a dilated or dilatable os, and it will be fortunate if we meet with this. If not, dilatation will be necessary, either by the finger or by means of tents, or Barnes' bags. A very useful contrivance used in the removal of the fleshy mole is the Beecher forceps, termed by him a "New Abortion and Placenta Forceps." A description can be found in the *Medical News*, 1883, xlii, 259. The advantages are: It is adapted to the removal of the fœtus in abortion, and the placenta, moles, etc., taking hold of a larger portion at a time without in the least imperilling the mother's parts. Besides what may be caught in the jaws, if any portion of the mass extend beyond and between the blades behind the shoulders, they are also held without being crushed through, as would be the case in the Bond instrument, with its closely approximate blades; and greater purchase is given upon the mass. The fenestrum allows a protrusion through it, and prevents the crushing through the placenta without the ability to remove a portion of the mass other than in shreds. It can also be used as a dilator.

In some cases the moles adhere to the uterine wall as firmly as a placenta glued by fibrinous deposits. In such cases a curette is necessary. If the diseased tissues be not removed entirely the portions remaining may give rise to grave and exhausting discharges or the recurrence as before mentioned.

It is also important to remember in this connection that twin pregnancies may occur in which vesicular degeneration affects the membranes of but one ovum. It is well, therefore, to bear in mind the possibility of this, and that the sound ovum may develop to full development.

Even after evacuating the uterus there may be a good deal of hæmorrhage. If so, repeat ergot, use abdominal pressure, and give iced drinks, etc. The slow convalescence may be hastened with iron, nux, quinine, nutritious food, wines, etc., as the case may indicate.

517 Pine St., Philadelphia.

PEROXIDE OF HYDROGEN AS A REMEDIAL AGENT.

Read before the St. Louis Medical Society, February 4, 1888.

BY I. N. LOVE, M.D.,

CONSULTING PHYSICIAN TO THE CITY HOSPITAL, ST. LOUIS.

I am aware that there is a disposition upon the part of some workers in the profession to decry the merits of those whose efforts tend in the direction of therapeutic investigation, and the application of remedies to the relief of disease, the rather appreciating pathological research and the study of the phenomena of disease.

Fully recognizing the importance of closely and carefully scrutinizing the anatomical, physiological and pathological panorama that may be presented to our view, I cannot refrain from suggesting that after all the main object to be attained is the relief of suffering and the prolongation and saving of human life. The most profound pathologist would be powerless for good did he not have as an ally the delver among drugs searching for the means of mastering the microbes which he has discovered, and the studious, thoughtful practical physician, accomplishes

the greatest amount of good and secures the most substantial success who promptly applies the knowledge gained by both workers, and all are co-laborers aiding the securement of that grand millenium when man will pass from the cradle to his second infancy without the shadow of suffering or a thought of disease.

Huxley has said that an exhaustive study of drugs on the part of physicians, was not necessary to their proper application to the cure of disease any more than a complete knowledge of the manufacture of surgical instruments was necessary to their successful use by the surgeon; however, a practical familiarity with the make-up and mode of action of these medical and surgical tools is essential to their graceful and efficient use.

The medicament to which I propose to direct your attention in this paper is the "Peroxide of Hydrogen," the formula of which is H_2O_2, and which was discovered in 1818 by Thenard, by adding dilute acids to peroxide of barium. Meissner, in 1863, proved its presence in the rainwater collected during thunder storms, and this has been corroborated by Schönbein, Struve and others. The usual preparation of a solution of peroxide of hydrogen depends upon the decomposition of barium peroxide by hydrocloric acid (carbonic or hydrofluoric acid may be used) in the presence of ice cold water, and the precipitation of the newly formed barium chloride by means of sulphate of silver. Such solutions usually contain about 3 to 5 per cent. of the peroxide, and are concentrated by freezing, the last portions of water being evaporated *in vacuo* over sulphuric acid at a temperature not exceeding 68° F. In this form it is a colorless, transparent, syrupy liquid, with a specific gravity of 1.452, does not congeal at 22° below zero (F), volatilizing slowly and without decomposition at the ordinary temperature. It is decomposed when exposed to the sunlight, or when heated or brought into contact with charcoal, silver, gold, the platinum metals, the oxides of maganese, alkalies and other compounds. In this concentrated form the peroxide, if brought under the conditions favorable, may decompose with explosive violence, and in the presence of the oxides of the metals mentioned they are reduced to the metallic state.

Many other bodies act less energetically or are oxidized. Litmus and tumeric paper are gradually bleached, and the skin may be turned white by its application, accompanied by itching. In the strength to which I am now referring it is without odor and has a harsh and bitter taste, soluble in water in all proportions, which solutions are decomposed by the same agents as the pure compounds, but less violently. They are made more permanent by adding a small amount of mineral acid.

The commercial peroxide of hydrogen is a 3 per cent. aqueous solution, and is prepared on a large scale for the bleaching of animal products such as feathers, hair, silk, bone, etc. It is known as "ten volume peroxide of hydrogen," owing to the fact that it yields about ten volumes of active oxygen which may be estimated by adding a sufficient amount of sulphuric acid, and afterwards a standardized solution of potassium permanganate as long as the latter is decolorized. From its very nature this agent should be a powerful antiseptic and a destroyer of microbes; anything which accomplishes oxidation as rapidly, if it can be applied safely, must be an excellent application to purulent surfaces for its cleansing effect. It has been administered internally for diabetes, but without success. Its recommendation for some forms of atonic dyspepsia, would seem to be reasonable, since we know that condition to be frequently due to a catarrh of the gastric mucus surface accompanied by excessive secretion and fermentation.

I find there is considerable variation in the effectiveness of solutions coming from different drug stores; this may be due to a failure to protect it from the sunlight. It should be kept in opaque bottles at a temperature not above 77°. I have secured uniform satisfaction from the solution manufactured by the G. Malinckrodt Chemical Co. of St. Louis.

The clinical application of a remedy is the best test of its value. As a contribution to the fund of knowledge upon this subject, I herewith present the following cases:

Scarlet Fever and Diphtheria.—R. H., aged 4 years, an unusually intelligent and interesting boy, developed scarlet fever Dec. 22, 1887. A pronounced case, temperature vibrating for several days from 102° to 104°, throat quite sore, some disposition to ulceration upon both tonsils. Within a week symptoms much modified, temperature ranging in the neighborhood of 100°, where it remained for four days, child being quite playful but not permitted to get out of bed. At this time diphtheria became a complication, involving the pharynx and the nasal passages. The secretions from all the mucus surfaces were very profuse and purulent in character, and suffocation at times seemed imminent from its accumulation, and the odor was extremely offensive to the patient as well as the attendants. A well organized fibrinous exudation appeared over the surface of the tonsils well forward to the palate, and upward to the posterior nares. The submaxilary and sublingual glands were much enlarged and engorged. Wherever a mucus surface was visible, if not covered with diphtheria membrane, it was violently inflamed nearly to the point of ulceration, and exuding a purulent and almost disgusting discharge. Temperature ranged in the neighborhood of 104° and 105°, and almost constant paroxysmal cough was present, due to the general irritation, and accumulated secretions, and at times a marked asthma was present, owing to reflex irritation, dependent upon the inflammation of the posterior nares. The general conditions were alarming, the child being almost in a state of frenzy, owing to his many discomforts. I shall not give in detail the notes of the case, as I only cite it as an illustration of the value of a particular remedy to relieve a particular series of symptoms.

Having been using the peroxide of hydrogen in various strengths for some months as a purifying and stimulating wash for purulent ulcers, sinuses, and

fistulæ, as well as diphtheria, I concluded to use it as an application in this case. Diluting it with one part to two of water for application to the nasal passages by means of a syringe, and using it in its purity by means of probang and absorbent cotton to the pharnyx. I soon had the satisfaction of seeing the pus, and accumulated mucus cleaned out from all the surfaces as if by magic. The child was a bright little hero, and, though semi delirious, he helped materially in its application, and also in the the removal of the oxidized purulent matter. The nasal passages, front and back, were soon cleared out, the fauces as well were kept in a comparatively clean condition. A good opportunity was now presented for applying the solution in its purity to the membrane direct, and the disintegration of the same was accomplished after repeated application in a very decided manner. Wherever the solution came in contact with organic matter, a marked effervescence and bubbling ensued, and a breaking down of the accumulation or exudation and throwing off of the same occurred. The beneficial effect of the application was apparent, all the distressing symptoms were much abated, and within three or four days they had passed away. One thing quite noticeable was, the fact that the constant spasmodic cough subsided after the removal of the purulent secretions from the nasal passages.

The success in this case was similar to that in six other cases, and I quote this one as illustrating the class, not desiring to indulge in repetition by reporting them all. This child was in a most dangerous condition for many days and nights, and I do not claim that the peroxide of hydrogen saved him; but it certainly helped to do it, in that it enabled me to combat the local poison, acting as an antiseptic, a germicide of the most pronounced character, a remover of purulent septic matter and offensive odors, aiding in the conservation of comfort to patient and attendants.

Constitutional measures were, of course, never lost sight of, constant attention being directed to excretion, sedation, stimulation and nutrition. Other local measures were of course used, the peroxide serving as a means of "clearing the track" for the application of soothing and healing ointments to the nasal passages and the spraying of all the surfaces with Listerine and other remedies as indicated.

En passant at this point permit me to remark that I have no patience with the practitioner who permits himself to be overcome by a physical, mental and scientific inertia, so that he can sit idly by and trust entirely to the *vis medicatrix naturæ*. If one's house is on fire and he trusts to nature instead of turning on the hose, the chances are that he will sleep on the commons unless a friend takes him in. The "therapeutic nihilist" should change his calling. The practitioner with no faith in physic, who, like Solomon, cries out "All is vanity," gives evidence that he has mistaken his vocation; or, like Solomon, indicates that it is time for him to abdicate. What would one think of a soldier who was ever decrying the merits of his cause and gun? Either that he has a poor cause and an inefficient gun, or does not understand the one nor know how to use the other. In the management of no disease, in my judgment, is it so necessary for the attendant to be ever on the alert as in diphtheria. He should sleep on his arms, so to speak, with one eye open; anticipate his enemy rather than run the risk of a surprise. Well supplied with ammunition, ready to use it "not too much but just enough," and possess an abiding faith in its efficacy. In wrestling with disease let us pursue the course with remedial agents that we do with friends; study them, try them, weigh them in the balance thoroughly, and if not found wanting adopt them and trust them. Then let us stick to them as long as they prove faithful. If they fail us and a better one be presented, accept it if it stand the test and prove worthy. In short, let us not drop an old friend for a new unless the first prove false and the second give evidence of virtue. As an adjuvant in arresting the destructive tendency of diphtheria I am persuaded that the peroxide of hydrogen will stand the test of time.

Purulent Ozæna and Chronic Nasal Catarrh.—I have applied the peroxide of hydrogen in strengths varying from 1 part to 3 or 6 of water in four cases of the above character during the past month. Very favorable reports have been given me, enough so to justify me in considering it of great value in this trouble. A sufficient time has not elapsed to enable me to determine whether it will secure a permanent cure. The application was made three times daily.

Acute Coryza.—The peroxide in the proportion of 1 to 4 of water was applied freely by means of a syringe through the nostrils, a hard rubber syringe gently throwing about 2 tablespoonfuls into each nostril while the head is thrown backward. It passes back through the posterior nares, carrying the completely oxidized mucus secretion with it. It is then applied to the fauces in the same manner. A free sneezing and perfect discharge follows. The application is made about once in four hours in the beginning and less frequently later. Three such cases were greatly relieved after first application and cured inside of a day or two. It is well known that influenza, in some cases at least, is dependent upon some irritating germ, and possibly the agent used above killed the microbe.

Whooping-cough.—In two cases where the paroxysms were frequent and violent I have had great satisfaction in seeing the frequency and severity much modified by the use of the peroxide of hydrogen (1 to 4) twice daily, and the attack was unquestionably cut short.

Reflex Asthma.—Two cases of reflex asthma intercurrent during an attack of diphtheria and a general catarrhal fever, dependent upon the irritation in the post-nasal space, were promptly relieved after a few applications of the peroxide (1 to 4).

Follicular Tonsillitis.—Very satisfactory results were obtained by using the remedy as a gargle (1 to 3) every two or three hours. Listerine, callendulæ, tincture of iron and other soothing, stimulating and astringent remedies were used by the atomizer between the intervals.

Hay Fever.—I have not used the remedy in this trouble, but would suggest from the manner of its action that it is worthy of trial.

Cancer of the Womb.—In this affection I have had great satisfaction in using the peroxide in its purity as a cleanser, deodorizer, and stimulator of healing in that portion of the ulceration probably dependent upon the irritating effect of accumulated purulent matter. The gratification and comfort to patient and attendants secured by the application well repaid its use. One who has never observed the horrible stench in the room of a neglected cancer of the womb can have no conception of the value of the drug in this connection. Dr. Joseph Grindon, a dermatologist of St. Louis, informs me that he has used the agent to remove pigment spots from the skin. This is the main remedy furnished by dealers to weak-minded women for blonding the hair.

It is needless for me to continue to cite cases and conditions where the peroxide of hydrogen will prove of value. I think it worthy of trial in gonorrhœa.

After a six months' trial of the peroxide of hydrogen, considering the nature of the agent and its effect upon purulent matter and bacteria, I feel justified in concluding:

1. The peroxide of hydrogen is a most efficient means of cleansing purulent surfaces, deep cavities and sinuses, and stimulating the healing process in ulcerating parts.

As a destroyer of microbes it is of great value as a local application in diphtheria and scarlet fever, ozæna, coryza and whooping-cough.

3. For the above reasons it should prove of value in gonorrhœa, hay fever, and similar disturbances probably dependent upon specific germs.

FACTS IN RELATION TO EMACIATION.

Abstract of Paper read before the Medical Society of the District of Columbia.

BY THOMAS TAYLOR, M.D.,
OF WASHINGTON.

For several years past I have devoted much of my time to the crystallography of animal fats, and have examined, crystallized and photographed the fats of several hundred animals, and a few vegetable oils. In the prosecution of this inquiry I observed incidentally, that the fats of several monkeys, victims of consumption, when rendered, strained and cooled, at a temperature of about 70° F. according to my usual method of treating fats in order to crystallize them, exhibited but a trace of the solid fats; the mass consisted principally of olein. From this fact my attention was directed to the consideration of the fat of human beings, subjects of emaciating diseases, from whatever cause. I have tested the fats of three consumptives who were greatly emaciated. The fats were crystallized in the usual manner—boiled, strained and cooled, at 70° F.—and, when examined, were found to be nearly destitute of solid fats, olein largely predominating.

While the cases cited are insufficient data for determining what may be the invariable condition of the fats of emaciation, I deem the facts thus far observed, worthy of attention, and I propose to continue these researches in order to ascertain whether the conditions I have stated are constant. If in the animal economy, it can be shown that there is a greater tendency to oxidize the solid fats than the oil, in cases of high temperatures and emaciation, valuable information will be gained.

With regard to the composition of fats in general, they consist of three distinct fats, viz: olein, palmatin and stearin. These are known as glycerides of the fatty acids oleic, palmatic, and stearic. Early chemists applied the term margarin to a substance they believed to be a simple fat, but modern chemistry has demonstrated that this substance is merely a combination of palmatin and stearin. It has been demonstrated that the fat of milk and butter contains but a trace of stearin, and that it is composed mostly of palmatin and olein, and it is also stated on high authority, that the fat of man is of similar composition.

In my investigations relating to the forms of animal fat, I have observed that the crystals of human fat have a marked resemblance to crystals of milk-butter, suggesting the importance of the use of milk-butter as the proper form of fat for man, and superior to fats which consist largely of stearin, such as some oleomargarines I have tested.

According to modern chemistry stearin requires a temperature of 144° F. to melt it, and in each succeeding fusion a still higher temperature is required. For this reason the common fats cannot be as well adapted for the sick as butter, which melts at blood-heat. Therefore I think it might be well to test the value of pure butter as a substitute for other forms of fat now in use in cases of emaciation. In this case I would suggest that butter used for this purpose be boiled and strained to remove its casein, the casein of milk frequently proving very indigestible and unbearable to a weak stomach.

Milk, the natural food of man, contains all the essential proximate principles necessary to build up a perfectly healthy human being; but the butter fat of milk contains but a small proportion of nitrogenous matter as compared with the milk from which it is made; therefore, butter of itself does not afford sufficient nitrogenous matter to sustain life but for a limited period. As it is desirable to make sure that the diet contains a proper amount of nitrogenous matter, in an acceptable form, I recommend the use of peptonized beef, in other words, digested beef, in connection with butter so treated. Such a combination would build up the vital tissues.

As the solid fats of butter contain a larger amount of carbon than is found in the same amount of oil, the oxidation of these solid fats would contribute more animal heat than would the oxidation of the oil. In this process water would be formed, the elimination of which would lower the temperature of the body, thus tending to arrest the destruction of the tissues.

The "Revue Médico-Pharmaceutique is the title of a new journal recently begun in Constantinople, and edited by M. Apéry.

MEDICAL PROGRESS.

THE TREATMENT OF WOUNDS BY IODOFORM TAMPONS.—DR. F. BRAMANN reports (*Archiv für klinische Chirurgie*, Berlin, 1887) the results of treatment of wounds in von Bergmann's clinic for some years past. The gauze employed is sterilized by means of steam at 212°, and after drying may be impregnated with an antiseptic solution. The sterilized gauze is used in cases of trifling operations in small wounds. In larger wounds with more profuse secretion, it was thought best to obtain whatever advantage could be derived from the impregnation with corrosive sublimate, especially as the patients and operators are in the immediate vicinity of an audience coming direct from the anatomical rooms. The cotton employed is of late years merely sterilized. The towels, gum cloths, sponges, etc., are treated in a like manner. The silk used in sutures is wound on glass or metal spools, sterilized by steam, and inclosed in metal caskets. The catgut used for deep stitches (stitches of relaxation), and for ligatures, is kept ten to fourteen days in a solution of 4 parts bichloride, 800 of alcohol, 200 distilled water. This is frequently renewed. The catgut is then changed to an alcoholic sublimate solution of 1 to 800 alcohol and 200 parts of water, and is taken direct from this. The preparation of the patient consists in giving full baths, washing the region of operation with soap and water, shaving the part, rubbing the skin with ether, and disinfecting it with from 1:1000 to 1:200 solution of sublimate. The instruments are kept in a 3 per cent. solution of carbolic acid. During the operation the wound is often irrigated with 1:2000 bichloride solution. In operations in the abdomen, the pleural cavity, the mouth, rectum and bladder, salicylic acid 1:1000, or boric acid 1:200 is employed, and at the end of the operation a solution of iodoform in ether is generally used.

Next to strict antisepsis, the complete stoppage of bleeding is regarded as the chief agent in procuring union by first intention.

When the wound is dry, and the smallest bleeding vessels have been tied, the suture is applied with or without drainage, but only in those wounds which are considered absolutely antiseptic, and have not been infected through previous suppuration or contact with unclean materials. Among the cases treated in this manner are included all extirpations of tumors, removals of breasts, amputations, osteotomies, etc.

In wounds where the bleeding cannot be entirely stopped the formation of a large clot is objectionable, not only on account of the pressure which it may make, as in fractures of the skull, but because of the risk of decomposition and blood poisoning. Although such clots may, through absorption and organization into connective tissue, aid in the process of repair, they sometimes remain fluid for long periods, and during that time are a source of danger. Therefore, when it is impossible to dry the wound absolutely, or where there is the least suspicion that it is not entirely aseptic, after thorough disinfection with 1:1000 bichloride solution and with an ethereal solution of iodoform applied to the wound by means of a syringe, it is loosely packed with strips of iodoform gauze of several feet in length, and three to four inches broad. They are applied so that the larger part of each strip lies in the wound, and the ends come out at the angles. The sutures were formerly put in at this time, but this has been abandoned on account of the difficulty in keeping them disentangled, and of their adhesion to the iodoform gauze. The patient is now anæthetized a second time for the application of the sutures. The tamponed wound is covered with sublimate gauze and cotton and an antiseptic bandage. If the secretions make their way through the dressings, the superficial layers are renewed, but the iodoform gauze is allowed to remain undisturbed for two days. If it is then removed by gentle traction on the ends hanging out of the wound, the latter is found clean, unirrigated, not reddened, absolutely dry, and it is only very exceptionally that a ligature is required. Careful suturing, with or without drainage, has resulted invariably in union by first intention, even in those cases in which, for any reason, as great weakness, or for the stoppage of bleeding from large vessels, the tampon has been left in from four to six days. His report of his results is extremely interesting, includes a large number of important cases, and appears to confirm his estimate of the value of this method.—*American Journal of the Medical Sciences*, January, 1888.

THE DIET OF NURSING MOTHERS.—The influence of the diet upon the function of lactation is a subject of such importance for the rising generation as to warrant frequent investigations by scientific authorities. It seems to be one of the evils inherent in a high degree (so-called) of civilization that women, in a large proportion, especially among the upper and middle classes, should suppress and ignore the physiological function of the secretion of milk, and abandon the privilege of nursing their children in a natural way. But this being the case, it is desirable that the best substitute be provided. The feeding-bottle is but a poor substitute for the mother's breast, and of late there is a tendency to give too diluted a milk. A wet-nurse is the best substitute for the mother herself, and a knowledge of the influence of the food upon the composition of milk ought to be widely circulated, at least in its chief features. DR. ZALESKI, Docent in the University of Dorpat, is the latest worker (*Berl. Klin. Wochenschr.*, Nos. 4, 5, 1888) in this subject. He has made careful analyses of the proximate constituents of milk, both in the lower animals and in women, under various conditions of diet, and his chief conclusions are: 1. Milk which contains an undue proportion of fat may have a very injurious effect upon the child. 2. A highly nitrogenous diet causes a great increase of fat in milk; the same kind of diet lowers the proportion of milk-sugar, but has very little influence over the other constituents. Alcohol exerts the same influence as a nitrogenous diet. 3. A proper composition of the milk may be attained, speaking generally, by the use

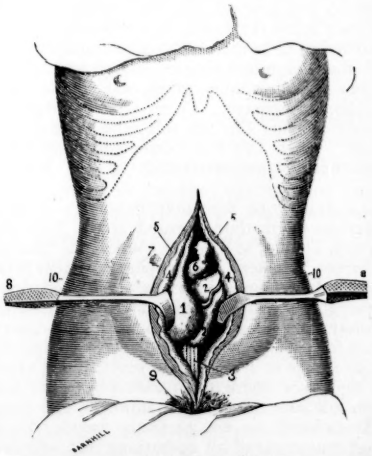
of a proper dietary. 4. The lower animals are subject to the same laws as human beings in the above respects. 5. A large proportion of milk is derived, directly or indirectly (that is, by changes in the blood itself or in glands), from albuminous sources. The above conclusions are directly opposed to the views of the laity on the subject. The wet-nurse, as a rule, is a highly privileged being, who must be allowed an unlimited quantity of butcher's meat and a good supply of stout. The amount of exercise usually taken is a gentle saunter at her own sweet will; active exertion is out of the question. Probably the diet has been previously very plain, and too often the sudden change influences the composition of the milk to the detriment of the child. Diarrhœa, of a more or less fatty character, is often the consequence, and Dr. Zaleski instances a case in point. Chemical analysis of a specimen of the milk of a wet-nurse revealed over 6 per cent. of fat, and inquiry was made as to the condition of the child. It appeared that the child was ailing ever since the services of the wet-nurse had been called into requisition. The latter was a poor girl, whose diet and whole course of life was changed when she became a wet-nurse, and that this injuriously affected the lacteal secretion was proved by the fact that her own child had been far from well since then. An immediate return to the previous mode of life was ordered for the nurse, with the best results.—*British Medical Journal*, February 11, 1888.

OLD RUPTURE OF GALL-BLADDER; ADHESIONS OF LIVER TO COLON AND PELVIS.—In *Progress*, January, 1888, DR. JOSEPH EASTMAN, of Indianapolis, reports the following case:

Mrs. W., Chelsea, Ind., sent by Drs. Phillipps, of Chelsea, and Sipe, of Orange, with this letter of diagnosis: "1. Ovarian, (a) solid tumor of ovary rare. (b) Would probably be more movable. 2. Omental tumor; (a) solid tumors of omentum are almost invariably malignant. 3. Kidney; size, shape, mobility, correspond to a displaced kidney, which I think it is. It might be cancer of the kidney, but I do not think there is pain enough for that, so it is excluded. Finally, as the diagnosis is not clear, I would advise waiting till fall—watching its growth and other symptoms. Meanwhile, give general tonics and cheer her up. REAMY."

Examination: Somewhat elongated abdominal tumor a little to right of median line of abdomen. Could be outlined fairly well by palpation. It was not kidney-shaped, nor scarcely movable. Tumor gave impression of much thickness. Kidney of right side definitely outlined in normal position through thin walls. Subjective: Fourteen years ago had "spells of bilious colic," since then has felt dragging pains in abdomen, causing her to assume a somewhat stooped position. Contraction and pain increasing till the condition seemed to demand surgical relief.

Operation October 18. My usual aseptic precautions. Incision exposed abdominal organs as shown in figure. A firm cicatricial band held the right lobe of the liver down in the right iliac fossa. This was severed, thus enabling me to raise the inner margin of the liver and find the ascending colon, adherent to inner border and under surface of liver. On separating gut from liver I found, "plastered" between them, three gall stones the size of marbles. Felt more through wall of bladder and incised the cyst, removing fifty-one more gall stones. Gall bladder shrunken and dry. I here present them in box; they vary in size from a grain of wheat to tip of thumb. Closed incision into gall-bladder with silk, Lembert's sutures, to make the closure perfect, there being no gall in bladder. I did not put in a drainage tube, as the gall had escaped in some way for years through ducts, or else had not been poured into the cyst. Having broken up extensive adhesions on surface of liver and bowels, I put a glass drainage tube into the abdominal wound and closed the same around it. Nothing of note followed, except that the patient has made a good recovery and is at this date, December 15, seemingly cured. The liver can now be felt to the right and slightly above the umbilicus, its lower margin at least six inches higher than before the operation.



1—Righ: lobe of liver. 2-2—Bowel adherent to liver. 3—Cicatricial band dragging liver downward. 4-4—Peritoneum everted by retractors. 5-5—Thickness of abdominal parietes. 6—Bowel, also adherent to liver. 7—Umbilicus. 8-8—Retractors. 9—Mons veneris. 10-10—Sup. crest ilium.

Comment.—From what information we have, this was a case of formation of gall stones fourteen years ago, with enlargement and rupture of gall-bladder, causing local peritonitis, with resulting adhesions between liver and ascending colon. The alternate distension and relaxation of this bowel may have increased the extent of the adhesions downward and inward, until the inflammatory process firmly anchored the liver to the pelvis, by the formation of the dense band of tissue represented in the figure by 3.

In the *Transactions of the Indiana State Society*, 1879, Dr. Kemper, of Muncie, reports a case in some respects similar, except in the important particular

that Nature formed a biliary fistula, which cured the patient. In this same valuable contribution to the literature of the subject, Dr. Kemper collects a number of cases.

REMOVAL OF GALL-STONES.—In *Progress*, Jan., 1888, DR. EASTMAN also reported the following case: Mrs. H., æt. 59, living in Delaware county, Ind., near De Soto, consulted Dr. Bunch, the family physician, who not being positive of his diagnosis, called Dr. Kemper, of Muncie, who diagnosed a distended gall-bladder, and was positive it contained gall-stones. November 10, at patient's home, assisted by Drs. Kemper, Bunch, Wymans and Boyden, I opened the abdomen in the median line, making an incision some five inches in length, lifted the gall-bladder up into the wound and incised it.

A half-pint of inspissated gall and mucus passed out. Introducing my finger I could feel two gall stones the size of marbles; removing these I detected still another lodged in the duct, which was with some difficulty squeezed up into the bladder by pinching the duct below the stone. It was removed, the bladder stitched to peritoneal layer to abdominal wound, and the abdominal incision closed around a small rubber drainage tube, which was left in the gall-bladder for drainage. There was a free discharge of bloody mucous through this tube for five days or more. When this had become less the tube was removed. Patient recovered.

TREATMENT OF RETAINED PLACENTA.—DR. LANE describes the method pursued at the Rotunda Maternity, Dublin, as follows: When the placenta is adherent I believe the proper treatment is to pass the hand or fingers into the uterus and detach it, although I have been informed that some Continental obstetricians allow the placenta in such cases to remain for even a month after delivery (unless there is hæmorrhage or symptoms of septicæmia), especially in the cases where the patients have not come to their full time. I consider, however, that if the operator's hands be not perfectly aseptic, this is the most dangerous of all operations met with in midwifery practice, except the Cæsarean section. It has been recommended by some authorities to keep the fingers inside the membranes during the operation, but there are many cases met with where, owing to the friable nature of the placenta, necessitating the removal of small pieces at a time, this is impossible. Should there be any septic infection about the hand, and especially about the nails, the usual seat of such poison, I failed to see how such a patient can escape becoming infected; for it is analogous to vaccination, except that virulent poison is substituted for healthy lymph, and with unfortunately greater likelihood of its taking effect, owing probably to the prolonged contact. The uterus, except where it has already been douched out with the hope of getting the placenta away, as I have already mentioned, is always douched with antiseptic solution prior to introducing the hand. Although the left hand is recommended by many as being smaller and corresponding more with the pelvic curve, the right hand is the one generally used, for, the patient being in the obstetrical position usual in this country, the fundus of the uterus can be better and more easily supported by the left hand (the operator standing at the patient's back). Nor can an assistant, no matter how experienced he may be, support the uterus so satisfactorily as the operator himself, who knows the exact part of the uterus requiring pressure as to bring that particular part of the uterine wall nearer to the introduced hand, and who is able to remove it to some other part the moment required.

An anæsthetic, usually chloroform, in order that, if necessary, the hand may be passed in a second time where doubt exists whether all the placental tissue has been detached; for if the patient be perfectly conscious of what is being done, the operator must be very resolute to be able to withstand her solicitation not to pass the hand a second time, and I consider that, once the hand is introduced, the operation should be persevered in to entire completion. When satisfied on this point, the uterus should be again douched out with antiseptic solution.—*Practitioner*, December, 1887.

PICRONITRATE OF AMMONIA IN MALARIAL FEVER.—In the Bulgarian *Meditzinsko Spisanïe*, Nos. 31 and 33, 1887, DR. A. GOLOVINA, lady physician to the Varna Town Hospital, writes that, at the suggestion of Professor Fr. Goll, of Zurich, she tried picronitrate of ammonia, in 3-centigram pills, four times a day, in seven cases of malarial fever of quotidian type. In five the paroxysm ceased to recur (in one case from the second day of the picronitrate treatment, in three cases from the third day, and in one from the sixth). Three of the successful cases were of recent origin, and two fairly old. The quinine treatment had been previously tried in three of them (including the inveterate ones) without result. In a sixth patient, however—a lad with quotidian fever of two and a half months' standing—a seven days' course of the picronitrate utterly failed to arrest the paroxysms, the latter subsequently disappearing in two days under quinine (50 centigrams twice daily). The picronitrate apparently gave negative results also in Dr. Golovina's seventh case. No unpleasant secondary effects were ever observed.—*British Medical Journal*, February 11, 1888.

DRAINAGE AND PRIMARY UNION.—CHENIEUX, of Limoges, in an article on this subject, draws the following conclusions:

1. Drainage is prejudicial to primary union of wounds.

2. Wounds whose edges are perfectly apposed and made aseptic should heal by primary union.

3. In operations such as ovariotomy and hysterectomy, in which ligatures must be concealed and in which there are large bleeding surfaces, drainage seems to be rather hurtful than useful.

4. Exuded fluids seem to constitute reserve fluids, and to be reabsorbed into the system, in case of drainage they are lost, and become poisoned by microbes.—*Revue de Chirurgie*, November, 1886.—*Annals of Surgery*, Jan. 1, 1888.

THE
Journal of the American Medical Association.
PUBLISHED WEEKLY.

THE EDITOR OF THIS JOURNAL would be glad to receive any items of general interest in regard to local events, or matters that it is desirable to call to the attention of the profession. Letters written for publication or containing items of information should be accompanied by the writer's full name and address, although not necessarily to be published. All communications in regard to editorial work should be addressed to the Editor.

SUBSCRIPTION PRICE, INCLUDING POSTAGE.
PER ANNUM, IN ADVANCE.....$5.00
SINGLE COPIES.....10 CENTS.

Subscriptions may begin at any time. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made at the risk of the publishers, by forwarding in REGISTERED letters.

Address
JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION,
No. 65 RANDOLPH STREET,
CHICAGO, ILLINOIS.

SATURDAY, MARCH 3, 1888.

SANITARY ARRANGEMENTS OF LARGE COMMUNITIES.

The Inaugural Address of the President of the Liverpool Medical Institution at the opening of the session of 1887–88, delivered by DR. J. BIRKBECK NEVINS, and published in the *Liverpool Medico-Chirurgical Journal* for January, 1888, is one of exceptional interest. It is an exhaustive review of the sanitary conditions of the Hebrew camp in the desert, and of the cities of Manchester, Edinburgh and Liverpool. The Mosaic regulations for the health of the camp in the desert after the Hebrews left Egypt are, or should be, familiar to all; and the only reference that we will make to Dr. Nevins' discussion of them will be to quote the following: "All dead bodies also were to be buried entirely outside the camp, a sanitary regulation in advance of our own by thousands of years, for we have not even yet entirely ceased to bury our dead in the midst of our population, and thus to pollute both our air and water. We have not even attained to the wisdom which buried the dead in porous cloths, which favored the rapid oxygenation and thereby the removal of the body."

In regard to the sanitary regulations of Manchester there are several striking features: The city is situated on a level plain, that is skirted within 20 or 30 miles by a circle of hills. The rivers flowing by the city are rendered so impure by manufactories that the water is unfit for personal use; and the city is at such a distance from the sea that the removal of its liquid refuse is a difficult problem, as was that of removing the solid refuse from the streets and dwellings. The city contains 66,000 privies and 11,000 water-closets. Each house has a back yard, at the far end of which is an ash-pit and a privy, with a back door communicating with the roadway between the backs of houses on adjacent streets. The night-men of the city sanitary force have access to the ashpits and privies through the back door. The authorities provide two pans for each house—one for ashes, vegetable waste, and other solid matters; and the other a carefully made waterproof iron pan, that is put under the seat of the privy, and removed once a week or oftener. The water-closets empty into the sewers, and liquid slops from the houses without closets are poured into the sinks or into the gutters; but all solid excreta are received by the pan. As often as necessary a covered wagon, long and air-tight at the top, and with sides that fall down by hinges, is sent to collect these pans. Sawdust and carbolic acid are placed upon the bottom of the wagon, and the pan is taken from the privy seat through the door at the back, and then covered by an hermetically tight lid; this lid is so tight, and the wagons so fairly air-tight, that only a slight odor, chiefly of carbolic acid, is perceived as they go through the streets. The wagons are driven into the top story of what may be called a purifying house, and the contents of the pans are emptied into a hopper, and are finally converted into a dry powder, which is readily sold for $15 a ton as manure. The city guarantees that this shall contain a specified quantity of organic nitrogen and phosphates, to insure which the bones from slaughter-houses and other places are used and mixed with the powder.

Here, then, is a great city converting its solid excreta into a saleable manure, by a process carried on with such care and skill that the odor in the works is not oppressive nor injurious to health, and can scarcely be detected outside the works. The street sweepings are disposed of by being used to absorb liquid manure and sewage, so as to make a portable article.

In Manchester, also, the ashes and other dry and innocuous rubbish are made into a saleable article, after being burned, the residue being a mass of clinkers; these contain so much mineral and siliceous material that they are valuable as a material for making mortar for building purposes, and also for making brick. Diseased meat, dead animals, and spoilt or condemned fish are also utilized by being made into oil (used for lubricating machinery and for making soap), while the residue is turned into manure. Manchester has not yet solved the sewage problem, but is making preparations for conveying it to a place five miles distant, where it will be purified by pre-

cipitation with lime, and the sewage water will then be discharged into the Irwell.

From a sanitary point of view Edinburgh is exceptionally interesting, partly because the city consists of three portions of about equal size, that differ so much as to require different sanitary measures, and partly because a very important experiment in sanitation has been carried on in it for more than a century. The central and most elevated portion consists almost entirely of old houses, so constructed that sanitary improvements in them are practically out of the question. In this portion 8,804 houses have water-closets, and 8,664 have none. Nearly all the houses have a sink for the liquid excreta and waste, but the pail system is in full operation, the pails and ash-pans, and other receptacles for dry rubbish being removed by night-men. The night-carts are open, but made as water-tight as possible. So many ashes and dry street sweepings are collected on the rounds that the pails are emptied directly into the wagons, and a practically dry load is taken to the stations for removal into the country. In the lower parts of the city the scavengers' carts remove the dirt or refuse in the roadway, the walks are washed and some slaked lime is sprinkled on them. This is taken up by the next cart. In the new parts of the city the water-closets are almost universal. But in the final disposal of its solid refuse Edinburgh has more trouble than Manchester, since its value when offered for sale by the city is only a few cents a ton. The sewage of the city, however, is abundantly utilized for direct fertilization.

In Edinburgh there is compulsory notification of infectious diseases, which is liberally paid for, and compulsory removal of the cases to hospital if the medical attendant desires the cases to be so removed. The system works well, the compulsory removals being especially welcomed by the hotel and lodging-house keepers, because the medical officer has the room disinfected immediately, and then gives a clean bill of health. The effect of this system has been seen on both the general and the zymotic mortality: for a period of six years, commencing with 1869, the average general death-rate per 1,000 was 25.85, average zymotic mortality 17.98; for a period of six years, commencing with 1879, the average general death-rate was 19.04 per 1,000, a reduction of 25 per cent. per 1,000 average zymotic mortality 11.9, a reduction of 33.33 per cent. per 1000.

The special sanitary features of Liverpool are that it borders upon the sea, that water-closets are almost universal, and privies scarcely to be found, and that all the sewage of the city is carried out to sea. Other features are good water-supply, prompt removal of unsanitary property, improvement of ventilation by opening up courts, increased hospital provision, the scavenging of the streets, and the public urinals. From 1850 to 1885 the death-rate fell from 36 to 23.7 per 1,000, which is a saving of about 7,000 deaths annually. Practically none of the solid refuse of the city is utilized in the manner adopted in Manchester. The city has two dumping steamers that carry the refuse out to sea about two hours before high water. Combustible materials, such as matrasses, etc., are burned, and the ashes sold. Street sweepings are sent into the country and sold as manure. Until fifteen years ago the dry refuse of the city was used for filling in and making ground. This was objected to by citizens, and the corporation ceased to employ the cinder-waste, etc., for this purpose, though a thorough investigation made by Drs. Parkes and Burdon Sanders showed that after two or three years such ground might be safely used for building purposes, without any fears of sanitary evil results. Their report has been confirmed by the reports of the Medical Officer of Health of the city, and by those of the Health Officer of Manchester.

The "trough closet" system is also a feature of the sanitary arrangement of Liverpool, every court, in proportion to the number of its houses, being supplied with one or more. They are long deep troughs made of slate or some such non-absorbent material, and are placed under the seat of every closet. The troughs are filled about a foot deep with water from a tap out of control of the occupants of the court, but which is accessible to the night-man, who can dump the whole contents into the sewer, and then thoroughly cleanse the trough.

The 249 miles of sewers of Liverpool are ventilated by grates, 4338 in number, placed in the streets at intervals of about 80 yards, the clear apertures of the grates being never less than 63 sq. inches. These grates create no nuisance whatever. In addition to the street-drain gratings the court-drains are ventilated by ventilating shafts 6 inches in diameter. Every court is drained, and when there is no thoroughfare through the court the drain is closed at the top of the court.

In cases of infectious disease in Liverpool the bedding and such articles as cannot be disinfected by washing are removed, exposed to a high temperature (212°–220°), and returned in a vehicle that is

never used for conveying anything *previous to disinfection*. Infected rooms are disinfected by the burning of sulphur.

Almost in the centre of Liverpool is a large abattoir. Dr. Nevins states, from personal inspection that no nuisance arises from the city abattoirs. The manure and offal are mixed with dry ashes and sent into the country. The blood-clot is dried with the smallest possible delay, and before any trace of decomposition has set in. The small intestines of the animals are converted on the grounds into what is usually called catgut, and by a process that is comparatively free from smell or filth.

Dividing the ten years 1874–1883 into two periods of five years, we find that the deaths from fevers fell from an average of 23 in the first five to 10.8 in the second five years, and the deaths from diarrhœa from 32 to 21.4; showing a marked decline in the diseases most likely to be produced by nuisances.

UNETHICAL USE OF PHYSICIANS' NAMES.

In the Department of Correspondence we publish this week a letter from Dr. Charles W. Kollock, of Charleston, S. C., in which he makes a complaint that is perfectly just. With his letter he sent a column advertisement from the Charleston *News and Courier*, showing how the names of reputable physicians can get into strange places and very bad company. In this particular case these names are sandwiched between those of several prominent politicians and not a few so-called "pulpit orators." There are in all 21 names of Chicago physicians, representing the various colleges and both the regular and irregular schools.

With the clergymen and politicians that are afflicted with the apparently incurable itch of seeing their names in print, we have nothing to do except to say that if they are anxious to make a display of their ignorance they should do so in some way that will not tend to injure other and still more ignorant people that look up to them. Even an Ex-President of the United States—and there is only one—stopped raising pullets long enough to give "Dr. Morris Bernhardt" and "Dr. Louis A. Matthez" a recommendation in the following ungrammatical language: "He is entitled to confidence. As an optician I recommend him." The names of governors are "thick as leaves in Vallambrosa."

The profession in Illinois have been trying for years to get rid of quacks and irregular practitioners. But is it just that Chicago physicians should give them recommendations so that they may go off and prey upon the people and the physicians of the States that have no laws regulating practice. Dr. Kollock is a young man, but recently embarked in his practice and specialty; and it is in the highest degree unjust to him—and to every other practitioner—that medical men are so careless in giving their names to every pretender that comes into their offices with an autograph album. The very fact that a man comes into a physician's office and asks for his name is circumstantial evidence that he is going to use that name improperly. To an honest man the name of another man is, as a rule, not worth carrying around. For sufficient reasons we think it best not to publish the list of names sent us: but the time may come, if such things continue, when such a publication would be but an act of justice to the profession at large.

Lea Brothers & Co., of Philadelphia announce the early publication of a very important Clinical Atlas of Venereal and Skin Diseases, including Diagnosis, Prognosis and Treatment, by Professor Robert W. Taylor, M.D., of New York. The work is to be issued in eight parts, aggregating 58 large folio chromolithographic plates, and containing about 200 figures. It is to be published by subscription.

Thomas B. Lester, M.D., died at his home, Kansas City, Mo., Feb. 24, 1888. He was one of the oldest and most prominent members of the profession in that part of the State. He became a member of the American Medical Association in 1872, and once served as one of the Vice-Presidents.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICAL SOCIETY.

Stated Meeting, January 21, 1888.

The President, Y. H. Bond, M.D., in the Chair.

Dr. Meisenbach presented a specimen of

ATRESIA ANI.

The male child from which this specimen was taken was three days old before it was noticed that there was an imperforate anus and that the child did not pass the contents of the bowel, that careful examination of the genitals of the child which should always be made having been omitted. When I first saw the child it was three days old. I found that the extremities were livid, the skin was jaundiced, and the child was vomiting a yellowish-white fluid; there was no meconium, I think, but simply the contents of the

stomach. Upon a careful examination I found that the abdomen was very much swollen, slightly tympanitic. I found the perineum was very rigid. There was no sign whatever of a rectal bulb, and I came to the conclusion that the bulb or rectal pouch must be very high up, otherwise there must have been some indication to the sense of touch of its existence. I found in the raphé, at the site where the anus should have been, a slight protuberance, which is very nicely shown in the specimen here. I told the mother that, on account of the length of time that had elapsed, the condition of the child and the symptoms, in my opinion, if the operation were performed, the child would probably die, and that I would not operate without the father's consent. The father opposed the operation upon the grounds I have stated, that the child was then almost in the throes of death. I have here the rectal bulb, a section of the perineum, the bladder and one-half of the pelvis of the child. The rectal bulb terminates fully one inch above the perineum. I left the meconium in, to show the relations of the parts more clearly.

I found that the view which I had entertained that the rectal bulb must necessarily terminate very far above the perineum was correct. The intervening tissue does not show any development of the rectum at all; it shows simply a fibrous and connective tissue development. There are various stages or forms in which this malformation may occur. It may be very high or it may be a mere septum barring the opening. It may be very readily severed, or there may be various degrees of the distance from the perineum to the bulb of the rectum. Part of the colon may be absent as far as the ileo-cæcal valve, and there may be merely a cord representing the colon.

The practical point that I wish to demonstrate is in regard to an operation. The first and most natural way of correcting the malformation is to cut down through the perineum and attempt to reëstablish the prima via, and in some cases this is possible, and in those cases where the termination of the rectal bulb is superficial that is the operation to perform. If you remember the anatomy of the infant pelvis, you will recall that the area of the perineum is very limited; we will find by measurement in the newborn that the distance from one tuberosity of the ischium to the other is not over 1 inch, and also that the antero-posterior diameter of the perineum from the arch of the pubes to the tip of the coccyx is also not more than 1 or 1¼ inch. With an area of 1 inch by 1 inch, the operation is a difficult procedure, and especially so in a case like this; the bowel being practically almost out of reach, so much so that it may be impossible to establish a rectum through the perineum. The other two operations then would be by opening the rectum in the inguinal region or in the lumbar region. If it is not possible to establish the prima via through the perineum, resort is had to one of the other operations. It has also been attempted, after performing the operation in the inguinal region or in the lumbar region, after the patulency of the canal has been established, to again open the tract through the perineum, but this has proven to be a very dangerous procedure. Cases in which it has been attempted have proved fatal. The practical question is, whether the patient would not be better dead than to have the rectum either in the lumbar or inguinal region? Of course, if this child had been seen at an early day, within a few hours after birth, either one or the other of the two latter operations might have been successfully accomplished as far as the life of the patient or the operation was concerned, but the question is whether it would have been a practical operation as far as the patient was concerned, when you take the conveniences of life into consideration. I think this is an open question. I believe a patient is better dead than to have an anus in the lumbar region or in the groin, whether that patient be young or old. Of course this is probably not the right view to take from the standpoint of the surgeon, but I think that is the proper view to entertain from a moral standpoint.

DR. EDW. BORCK: If you had seen this child in the beginning, what kind of an operation would you have performed in this case?

DR. MEISENBACH: I should probably have attempted to find the gut through the perineum. If satisfied that I could not accomplish this I would have reached it through either the inguinal or lumbar region. Of course that point would not have been decided before the operation.

DR. EDW. BORCK: The pathological specimen is interesting and instructive, especially to the surgeon who takes an interest in congenital malformations. If there is simply a thin septum of perineum over the rectum, it is a very simple matter; but if the bulb of the rectum is high up and you cannot pull it down, the operation is much more difficult. I have had several such cases. In one case I made an incision until I reached the rectum, and then operated no further for three days, simply keeping the wound open with sponges. On the third day after I found that the meconium had come down and distended the part so that there was no trouble to make an opening and stitch the end of the gut to the skin, thus making an opening. In that case the child recovered without any bad symptoms.

DR. DEAN: There is one point that should be examined still more closely: to see if there is any connection, however fine, with the urethra or neck of the bladder. It is very seldom that atresia ani occurs without there being an exit somewhere, either into the vagina, bladder, or into the urethra or ureters even. As the ureters do not develop from the kidneys downward to the bladder, but from the bladder upward toward the kidney, so that where there is but one kidney, there may be two ureters; one to one kidney, the other extending from the bladder a considerable distance toward where the other kidney should be; so the anus is formed by an invagination, involution or growing in of the epiblast upward, meeting the lower end of the bowel above. The tendency of the mesoblast is to unite in advance of the epiblast. If the splanchnopleure closes before the somatopleure, the opening may remain in the cloaca or in the sinus urogenitalis.

DR. MEISENBACH: I distended the bowel pretty thoroughly, and as far as ordinary evidences go, there is no opening communicating from the rectum to the

urethra or otherwise. If any had existed I must have been able to express from it some of the meconium and fluid. I found no evidences of exudation. There was one slight incision which I made when dissecting out the parts. I sewed that up carefully and then put pressure upon the contents of the bulb and tied it down, and found no evidences of any escape of the fluids. The meconium that escaped at first through the incision was mucus tinged with green.

DR. DEAN: I would suggest that a very fine grooved director be used to open the urethra into the lower part of the bladder, so as to see from before backward, and see whether any point of opening into the bladder exists.

DR. T. F. PREWITT presented an

UNUSUAL TUMOR OF THE UTERUS.

A few weeks ago a patient, a maiden lady, 47 years of age, came to me with a tumor supposed to be ovarian. It extended up above the umbilicus, fluctuated, was evidently a cyst. She had recognized its presence five years ago herself, but says that there had been something wrong about the uterus or pelvic organs for sixteen or seventeen years, at least so some physician supposed, and had advised an examination, which she objected to and no examination was made. She had menstruated from the time that she was 12 or 15 years of age; she menstruated until last summer, when, upon the receipt of some sudden distressing news, menstruation ceased for two months, and then returned and continued until five months ago, when it again ceased. There has been no indication of menstruation since that time. On examination I could detect this rounded tumor that, as I have stated, fluctuated. It was evidently a cyst. On making a vaginal examination, which was a little troublesome because the hymen was intact, I could detect the body of the uterus seemingly, and it gave to me the impression of a rather retroverted uterus from pressure of the tumor upon it. I could pass my finger back of the cul-de-sac of Douglass and feel the body of the uterus seemingly; passing forward around the cervix, my finger passed up to what seemed to be a sort of projection, a growth which apparently presented a sort of sulcus between the growth and the body of the uterus, as though the tumor was so closely connected with the body of the uterus that they could not be separated, that there was no space between them which could be recognized; still it had the feel to me as though there was a sort of sulcus between. Evidently the uterus was closely invested by the tumor; there was no fluctuation below; it was solid and hard. The uterus did not appear to me to be very much enlarged. I was much puzzled to determine the character of the tumor. That it was a cyst I was satisfied, but told her there was something unusual about it; that it was not an ordinary ovarian tumor. However, she was anxious to have it removed, and I saw no reason why it should not be attempted. I did not introduce a sound into the uterus, and afterwards felt that I had reason to congratulate myself that I did not. I suggested to her an exploratory laparotomy, and that if I found out I could not remove it there would probably be no great injury. She objected to this and said she wanted it out, and that she would rather die than let it remain.

Three weeks ago I opened the abdomen, and found a smooth round cyst which fluctuated, and which had some solid matter about the walls. I introuced a Wells' trocar, which let out a dark bloody-like fluid that soon plugged the tube so that it would not flow. I had to enlarge the opening in the abdominal cavity in order to get the tumor out. I examined the pedicle, and to my astonishment I found it continuous with the uterus. It was evidently a cyst filled with blood. At the upper part of what would naturally have been the uterus near the fundus the Fallopian tubes passed out. I passed my fingers along and picked up the ovaries; they were all right, and rising above from the fundus of the uterus was this tumor continuous with the uterus. The uterus itself did not seem to be very much enlarged, still there was this continuous growth above. I could see nothing to do but to remove it, and I did so, strangulating it to a certain extent with an elastic tube—a rubber tube first, and then ligating it, using Tait's ligature. There was little bleeding from one of the vessels. I found an opening in the lower portion of the cyst—I had opened the cyst by cutting it across—I could readily have passed a probe. I did not pass a probe and am now sorry that I did not. I closed it by the extra-peritoneal method. The patient has done pretty well although there has been some suppuration in the track of the wound, and seemingly a slight intra-mural hæmorrhage. On removing the dressing on the eighth day considerable bloody fluid escaped from the walls. The lower portion of this tumor is undoubtedly uterine. It was plain to me that it was uterine tissue; yet it was entirely above the Fallopian tubes, which are intact. The ovaries are also intact.

Here then, was a cyst that under ordinary circumstances we would suppose to be an hæmatometra, yet unique in its character. The woman had menstruated regularly for twenty-five years. She complained of some pain in the back, it is true, on the day before and the first day of her menstruation, but many women complain of pain during menstruation. She menstruated usually about three days, and has never had any irregularities in that direction. She menstruated until five months ago, yet she certainly had a tumor five years before. Hæmatometra are usually the result of an obstruction of the vagina or of the cervical canal by some means, either the result of inflammatory action or the encroachment of a tumor on it. This was not the case in this patient. She had menstruated regularly without any trouble whatever. Where then did the blood come from? And if it was an hæmatometra, how did it happen that the whole cyst was above the Fallopian tubes? Here was an opening that seemed to extend down into the cavity of the uterus, but the whole expansion of the tumor almost was above the Fallopian tubes. There is a thick wall I cut through to get rid of the tumor. The lower portion at least was uterine tissue; above it had so changed that it no longer resembled uterine tissue; it was not only a thin wall above, but there was nothing like uterine tissue

about it. I don't know whether the probe would have gone into it from the cervix or not, but I felt that I was fortunate in not having made the attempt, for if I had passed a sound into the uterus and could have entered the cavity I would almost certainly have set up a disturbance that would have resulted in destructive changes, a septic condition, and my patient would have been infinitely worse. When we have hæmatometra under ordinary circumstances we can certainly expect the body of the uterus to be distended; that certainly was not the case here; the body of the uterus is still within the abdomen, and the Fallopian tubes and ovaries are still intact. The whole expansion has taken place in the upper segment of the uterus above these appendages, and has taken place while the woman was menstruating regularly. This is something very unique in the history of hæmatometra. This woman was 47 years of age. Hæmatometra much more frequently occurs in young girls, although it has occurred in older women, women 45 and even 60 years of age, but it is very rare in women of that age.

In answer to several questions Dr. Prewitt said that so far as he knew the uterine cavity was left intact. What was removed was simply expanded uterine tissue; where it was cut through it was clearly uterine tissue, but there were no indications of uterine tissue in the upper portion. There was no septum between the cavity of the uterus and that of the cyst. The opening was plainly visible, and seemed to pass down into the cavity of the uterus. He did not close the opening. The pedicle was treated by the extraperitoneal method. There was not much hæmorrhage. He did not know whether the canal leading from the cavity of the uterus up was perfectly developed and supplied with a lining membrane. He did not pass a sound, either per vaginam or from above into the pedicle, but the opening passed down in the direction of the uterine cavity. Why the fluid did not go into the uterus was the question. In answer to a question by Dr. Lutz, as to what was made to constitute the pedicle? Was it a portion of the uterine body that was continuous with the upper portion of the cyst wall?

DR. PREWITT replied: It seemed as if dilatation had taken place in the upper segment of the uterus, and could not expand any larger without involving the lower portion of the uterus. The uterus was larger than normal. The lower portion of the tumor was simply uterine wall, the upper portion was thin cyst wall. There was no distinct pedicle; it was simply a continuation of the uterine tissue. I cut it off straight across and closed it up. The only explanation that presents itself to my mind is that it was a biparte uterus, and one-half only of the cavity had become distended with menstrual blood; the other had gone on menstruating, and through some difficulty or other, a distension has taken place in one side only; one side has become distended, and a unilateral hæmatometra has occurred. We do have uterine fibroids sometimes breaking down in the central portion, forming a cyst. I don't think this was a tumor of that character.

DR. LUTZ: One of the most unfortunate circumstances in connection with this very interesting case is, as the doctor has well stated, his failure to introduce through the opening a probe into the uterine cavity, and we can judge only, therefore, from the appearance of the tumor as to its nature. It is a well-known fact that the ordinary division of uterine fibroids into the sub-mucous, the intra-mural and sub-peritoneal indicates their most usual localities. From the appearance of this tumor, from the fact that a portion of the tumor removed is apparently—and I say apparently, because no microscopic section of it has been made—a continuation of the uterine wall, and that the contents of the tumor are coagulated blood; and that the thinner portion is nourished by a large blood-vessel. On the inner aspect, perhaps to the right of where the incision was made to show the contents of the tumor is what I think is a blood-vessel. It has all the characteristics of a blood-vessel, and is about the size of the radial artery. It occurs to me that this tumor was a intra-mural fibroid at first, and as it gradually grew, growing in the direction of least resistance, it became a subperitoneal tumor and fibroid, and from what we know of the natural history of fibromata of the uterus, they are liable to undergo almost any kind of degeneration, so that we have in many instances a combination of the fibroid with cystic degeneration of perhaps only a portion of the so-called fibro-cystic tumor of the uterus. The argument for assuming this to have been a tumor of the uterus, and not a double uterus, is, in the first place, its peculiar position. It is one of the rarest things to have a double uterus with one portion situated higher up than the other. The ordinary configuration is that they are situated by the side. As I understood the description, the broad ligaments, the Fallopian tubes, the ovarian tissue, in fact all those tissues in which ordinary cystic tumors, or in which neoplasmata develop, were perfectly normal. Here we have a tumor covered by peritoneum, occurring above the uterine body, with no adhesions, no kind of connection with any of the adjacent tissues. In addition, we have a tumor in a woman at the age when we ordinarily expect to find fibromata; and more than that, at an age when we expect to find the changes which fibrous tumors undergo to take place. Now the same struggle is going on so far as hysterectomy is concerned; the question of whether or not to insert a stump of the uterus into the abdominal wall, or else treat it intra-peritoneally as especially developed by Dr. Martin, of Berlin. I would like to hear Dr. Prewitt's reasons for treating the pedicle in this case extra-peritoneally—whether he believes it was the safer method, or whether there was anything in the anatomical construction of the tissues involved or of the uterus to cause him to prefer the extra-peritoneal method. Every case of hysterectomy that comes up ought to be viewed with that point in view, and an endeavor should be made to determine which of the methods is preferable. I believe, as I stated at the outstart, that the intra-peritoneal method will supersede the extra-peritoneal, just as the intra-peritoneal method of treating the pedicle of ovarian tumors has superseded the implantation of the pedicle into the wall of the abdomen. About the time of

the menopause fibrous tumors are liable to undergo a degenerative process. I perfectly agree with those who say that it is impossible to determine the nature of this case from the microscopic appearance. To all appearances it seems to me that the tumor is continuous with the uterine wall. I believe, then, that the tumor is a uterine fibroid which has undergone cystic degeneration. Whether or not the extra- or the intra-peritoneal treatment of the pedicle is preferable is a question which is as yet *sub judice*. The tendency in abdominal surgery is toward the performance of the ideal operation; to endeavor to treat the pedicles of extracted tumors intra-peritoneally, the success of ovariotomy in that respect, and the gradual transition from one method to another will perhaps be followed in the treatment of hysterectomy stumps. You will remember that Spencer Wells has had more to do with diverting the treatment of ovarian tumors than any other operator. His first method, and in fact that of the most operators was to treat the pedicle of ovarian tumors extra-peritoneally.

THE PRESIDENT said that Dr. Bond had expressed his idea as to the character of the tumor. He thought it was an intra-mural fibroid with a tendency to become sub-mucous.

DR. WALTER COLES: I agree with Dr. Lutz in all that he has said in regard to this tumor, but there is one other point which suggested itself to me from the imperfect examination which I made, and that is with regard to the character of the contents of the tumor. If this were a double uterus, if the upper cavity were a portion of the uterine cavity, that would of course have the ordinary mucous lining of the uterus, and the accumulation of fluid in the tumor would be mixed with epithelium and partake of the character of menstrual blood. I understood that the tumor contained menstrual blood, but an examination of the specimen does not agree with this; in other words it shows that there is a great deal of coagulated blood that has undergone partial disorganization; that it is in layers; that it is organized in layers; that it is adherent to the wall of the cyst. Now if this were a double uterus, I don't think anything of that kind would be likely to occur; the blood would remain perfectly fluid, or in rather a treacly consistency, something like molasses, at least it would be mixed up with more or less epithelial cells, which would render the diagnosis certain if any of the contents of the tumor were examined. Then the presence of this blood-vessel—and not only one, but there are a number of smaller ones also coming up from the wall of this tumor, making their way into its disintegrating tissue, whether it be coagulated blood or a portion of the tumor. In these fibroids it seems to extend as the tumor grows; the wall seems to grow thinner, disintegration takes place in the interior of the tumor going on toward the surface, and as we approach the surface the wall becomes more and more highly organized until at last we meet with blood-vessels. It seems in this specimen as if these blood-vessels are making their way toward the interior of this tumor. How soft it was at the time it was removed, before it was subjected to the action of the alcohol of course I am unable to say. The whole appearance of the contents of the tumor would lead one to believe it was some other growth than simply the result of the coagulation of menstrual blood in a double uterus or in one side of a double uterus. Then, as Dr. Lutz has already stated, the situation of the tumor is very peculiar if it were a double uterus.

[Subsequent microscopical examination of the tumor showed that it was a degenerating fibroid.]

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA.

Stated Meeting, November 16, 1887.

THE PRESIDENT, JOS. TABER JOHNSON, M.D., IN THE CHAIR.

DR. P. J. MURPHY reported a case of

PUERPERAL TETANUS.

Mrs. Annie B., white, æt. 24 years, nativity Germany, was admitted to Columbia Hospital on the evening of August 9, 1886.

Her husband stated that she was delivered instrumentally of her first child three weeks ago by Drs. Sellhausen and Sowers. She did well for the first nine days. On the ninth and tenth days she sat up and on the latter day began biting her tongue, and "spasms" soon followed. The spasms had been occurring frequently since, and accompanied by high temperature and profuse perspiration. The day before admission she "broke out" all over her body. Is said to have had "lock-jaw," but can swallow now.

When admitted her temperature was 103.6°, and her pulse 140. The eruption was thought to be due to excessive heat. Bowels very constipated. Gave calomel grs. v, triturated with sugar. Patient was restless and delirious all night, having frequent spasmodic attacks with episthotonos. Temperature 104° and pulse 140 all night. Toward morning, under the influence of hypodermic injections of morphia, she slept some, but would awake suddenly with violent muscular contractions.

August 10, 5 A.M.—Temp. 104.2; pulse 125. She continued about the same all day. Enemata were given several times, but were immediately ejected. Skin bathed in profuse perspiration all day, notwithstanding frequent spongings. Had frequent attacks of episthotonos, and was continually dribbling urine. Took beef tea and milk freely.

Aug. 10, 7 P.M.—Temp. 105.6°; pulse 132. Was restless all night in spite of opiates.

Aug. 11, 6 A.M.—Temp. 104.8°; pulse 124. Emplast. canthar. applied to back of neck and an ice cap kept on head all day. Took nourishment readily but was delirious at times. At 2.15 P.M. temperature was 105.8°, pulse 142; at 3 P.M. temperature was 106°, pulse 142; at 6 P.M. temperature dropped to 105.2°, and pulse was full and strong. Was given 15 grains antipyrin, and heart's action rapidly weakened. Ordered tinct. digitalis 10 drops every 3 hours. Enemata again tried and comp. cath. pills, with no effect.

At 9 P.M., pulse being stronger and temperature remaining at 105°, she was given 15 grains more of antipyrin.

Aug. 12, 12.15 A.M.—Temp. still 105°, and patient delirious; gave third dose of antipyrin.

7 A.M.—Has not slept at all since the 10th inst. Gave cath. pills again.

9 A.M.—Temp. 105.2°, pulse 140, and feeble. Antipyrin having no perceptible effect except to weaken heart's action, was discontinued, and dose of digitalis increased. Patient seems brighter and is more quiet. Another blister to back of neck.

3 P.M.—Has slept two hours and bowels have moved three times, but her condition is much worse. Pulse at wrist almost imperceptible.

5 P.M.—Temperature suddenly ran up to 107°, and pulse too feeble to be counted.

7 P.M.—Temp. 108.4°. Patient is unconscious and her breathing stertorous. Usual restorative measures were employed, but patient died quietly at 8.30 P.M.

The convulsions gradually lessened in frequency and intensity from the time of her admission until the evening of the 11th inst. None were noticed after that.

Dr. Sellhausen called at the hospital August 19th and stated that he attended the woman during her confinement, and that she was delivered by forceps. The perineum was ruptured, sutured, and healed by first intention. She was seized with convulsions on the thirteenth day after delivery. Her extremities became rigid and her jaws locked. He gave her one-fourth grain morphia and 20 grs. chloral hydrate every two hours.

I have contented myself with the simple recital of this important case, the first I have seen after sixteen years experience in a lying-in asylum. To those interested in the subject, a perusal of Dr. Garrigues' article in the *American Journal of Obstetrics*, Vol. xv, October, 1882, will not be without profit; also the case reported by Dr. Boarman, of this city, and read before this Society May 18, 1887, with the discussion following.

DR. BOARMAN: Was there hæmorrhage or laceration of the cervix? What was her temperament? Was she subject to spasms or hysteria?

DR. MURPHY only knew what Dr. Sellhausen had told him. When she was brought to the hospital she was suffering from stupor alternating with delirium. There were jerkings about the face and neck; the opisthotonos would come on and her head would approach her heels, and finally she would give a bolt and almost fall out of bed. She was plethoric.

DR. BOARMAN: Tetanus occurring after labor at full term is very rare, but that occurring after abortion is more common. Callabin did not have a case in 46,089 labors. In 1849 P. Anbinaus reported three cases. Merriam collected 10,190 "cases of difficult labor with 106 deaths, and only one died of tetanus." Curling thinks it is more likely to follow lesions of the cerebro-spinal than the sympathetic system. There was either laceration or hæmorrhage in the cases he examined. In only two were the labors perfectly normal.

DR. GARNETT: Puerperal tetanus can hardly be caused by lacerations of the cervix, but must be due to some constitutional peculiarity. In forty years of practice he has never seen a case after a labor at full term. He has seen one follow abortion.

DR. THOMAS TAYLOR then presented some

FACTS IN RELATION TO EMACIATION.

(See p. 265.)

DR. BUSEY asked Dr. Taylor if there were any distinct characteristics by which ordinary people could distinguish oleomargarine from butter?

DR. TAYLOR: It is very easily distinguished. The crystals of oleomargarine may be detected with the naked eye by placing a small portion between two slips of glass and holding it up to the light, the translucent particles being crystals of fat; butter under like conditions presents an even cloud.

DR. FRIEDRICH: Can anyone tell oleomargarine from butter in the market?

DR. TAYLOR: It can be told by the taste and smell. Oleomargarine has no odor and a lack of taste, while butter has a pleasant odor and taste.

DR. SCHAEFFER: The subject of this paper, viz.: the discrimination between different kinds of fat, presents two aspects: one in a biological light, as bearing on the possibility of distinguishing between different species of mammals by a supposed distinctive structure of the tissues in each; the other in a sanitary light, as it bears on the possibility of detecting fraudulent adulterations of butter as an article of food.

While I have not examined so extensive a list of fats as those mentioned in the paper, I have arrived at the conclusion that the microscope is not a safe guide, with our present knowledge, when we endeavor to distinguish animal fats by their crystalline structure alone. The gentleman's statement, that all butter showing small crystals visible to the eye on pressing some of the sample between two glass strips must be rejected as spurious, is an erroneous one, as crystals of salt are frequently found in good "firkin" or "tub" butter. Is it not also illogical to expect to find a similarity between the solid fat of the sheep, hog, etc., and the oily product of the cow's lacteal gland—a gland hypertrophied by domestication and artificial selection? The use of solid fats as a remedy in tuberculosis is contraindicated by the proverbial distaste of patients for such food.

FRENCH SURGICAL CONGRESS.—The third session of the French Surgical Congress will be held in Paris, from March 12th to the 17th, in the large amphitheatre of the Administration de l'Assistance Publique, 3 Avenue Victoria. Professor Verneuil will preside. The following questions are down for discussion: 1. The Treatment of Gunshot Wounds of Viscera. 2. The Value of Radical Treatment of Hernia as regards Permanent Cure. 3. Treatment of Chronic Empyema. 4. Recurrence of Malignant Growths after Operation: its Causes and Prevention.

FOREIGN CORRESPONDENCE

LETTER FROM PARIS.

(FROM OUR OWN CORRESPONDENT.)

Antiseptic Treatment of Boils—Enlargement of the Breasts in Tuberculous Subjects—Angina Pectoris of Syphilitic Origin—Strophanthus.

Professor Verneuil, well known as the champion of conservative surgery, lately made a communication to the Academy of Medicine on the antiseptic treatment of boils and carbuncles. The author observed that the treatment of carbuncle has greatly varied within the last forty years, but has gradually become less surgical, without on this account being less efficacious. After having tried in common with other surgeons the old method of free incisions and punctures the result of which was anything but encouraging, Professor Verneuil resorted to the thermo-cautery, followed by carbolic acid dressings. But as he now obtains the same results with the carbolic acid spray alone composed of a 2 per cent. solution which he employs for two hours daily in two, three, or four sittings at the convenience of the patients, and with a powerful instrument This treatment is adapted to all the forms, to all the phases, and to all the stages of the disease. At the outset the carbuncle has the character of being aborted. Later on, should this result not have been attained, and the disease progresses, when perforation and mortification of the dermis have commenced and when suppuration and the elimination of the cores of the abscess are proceeding, this treatment limits the sphacelus, favors the separation of the sloughs, carries off mechanically the pus, disinfects and deterges the wound, and lowers the body temperature which is accompanied by the cessation of the general symptoms. When the subject is not cachectic, the granular membrane once deterged has generally a good aspect, and cicatrization proceeds as quickly as the extent of the loss of substance and the suppleness of the surrounding integuments would permit. Dr. Perrin, of Val-de-Grâce, stated that he employed another method with success, which consists in prolonged baths in hot water, and the application of a cold starch poultice during the night. A discussion followed in which several members took part. Dr. Le Roy de Méricourt, an old navy surgeon, did not believe in the microbian nature of boils and carbuncles. As to the treatment, he states, that if it be true that the carbolic acid acts as an antiseptic, he thinks that it would be preferable to practice an injection into the substance of the carbuncle, as is done with the tincture of iodine in malignant pustule. Should the patients feel relieved and the disease amends by the carbolic acid spray, he believes it to be due to the cold water and not to the acid. Several other members then gave the result of their experience, all adhering more or less to the old method, that is to the medical and surgical treatment, although there was a manifest tendency towards the former. To the objections that were made against the use of the carbolic acid spray, Professor Verneuil retorted that those who had not tried his method had no right to criticise it. Moreover, although he has now adopted this method as a general rule, he did not wish it to be inferred that this was done to the exclusion of operative measures in suitable cases but that he employs the thermo-cautery in preference to the knife.

Tuberculous subjects sometimes present enlargement of the breasts, which, in certain cases, assume an inflammatory character. Leudet, of Rouen, brought to the notice of the Congress of Grenoble, in 1885, several cases belonging to this first category. In his thesis for the doctorate, entitled: "Contribution to the Study of the Hypertrophy of the Mammary Gland in Pulmonary Tuberculosis," Dr. V. Allot states that, from his personal observations, he found that the development of the breasts takes place in an indolent and progressive manner. The mammary glands never attain a very great size, but the emaciation of the body contrasts with this development of the breasts. The skin presents its normal character. When a breast thus hypertrophied is examined with the hand, one feels the sensation of a hard mass, including the whole gland, without any adhesions to the skin or to the deep parts, and no puffiness of the subcutaneous cellular tissue is observed. This affection never terminates by suppuration, the regression of the breasts is never complete, and the nodosities in them always persist. In an anatomical point of view, remarks the author, the malady is constituted by an abnormal development of the fibrous tissue forming around the ducts and the lobules of the gland thick zones, diffused, and which tend to atrophy the glandular elements. The absence of abscesses of tubercles, of glandular enlargements remove the idea of mammary tuberculosis. The author concludes that this hypertrophy of the breasts is in reality caused by a chronic interstitial mammitis.

In the *Annales de Dermatologie et de Syphiligraphie*, Dr. Hallopeau contributes an article on angina pectoris of syphilitic origin. Syphilis, according to the author, may give rise in its secondary and tertiary stages, to attacks of angina pectoris, and these attacks may present the classical type of this affection. At times the attacks are complicated with other troubles of innervation connected with a reflex excitation of the vaso-constrictor or of the vaso-dilator nerves, thus provoking abnormal sensations of cold or heat in one half of the body with shivering and hyperhidrosis, and may give rise to paresis by ischæmia of the motor centres. These fits are attached to the development of specific neoplasms on the course of the cardiac plexus or in its immediate neighborhood, and they may be modified in their character under the evolution of the lesions, of their arrangement in the points primarily affected and of their extension to other branches of the sympathetic nerve. These attacks the author remarked, may be cured in a few days under the influence of the mercurial medication or of the iodide of potassium, and so thoroughly that they seldom or never return.

At a recent meeting of the Société de Thérapeutique, a discussion took place on the therapeutic action of strophanthus. According to the experience

of Dr. Constantin Paul and other members of the Society, strophanthus is less a cardiac medicament than a feeble diuretic, but of persistent effect.

A. B.

DOMESTIC CORRESPONDENCE

LETTER FROM NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

New York County Medical Association—Dr. Alonzo Clark—The Medical Profession as a Whole, and Physicians as Individual Members—The Care of the Pauper Insane.

The last meeting of the New York County Medical Association was occupied by the addresses of the retiring and incoming Presidents; both of which were able and interesting. Dr. John Shrady, whose term of office then came to a close, reviewed the work of the Association, and expressed the conviction that all the members could truthfully say that the year had added somewhat to their mental stock and directed their thoughts into newer channels. Having referred to the past year as being, in a general way, not very notable for brilliant discovery, although much good work had been done in the line of corroboration of that which is valuable, he characterized the Ninth International Medical Congress as a success, and averred that there were but few leaders capable of directing intelligent thinkers by the thousand; maintaining that no one man or body of men can lay claim to indispensability. He said that the phantasm of a possible medical centre for so large a territory as the United States had been dispelled forever, and pointed out that there had been many surprises, chiefly in the direction of the newer men, who snatched at the prizes abandoned by the older favorites.

Dr. Shrady attributed the success of the Association to the absence of medical politics, the encouragement given to latent talent, the elimination of dogmatism, the suppression of offensive individualism, and the care taken to make the contributions as exhaustive as possible. The acrimony of debate, he said, had gone out with the bickerings of the politician and the vaporings of the pseudo-reformer.

He then alluded, in feeling terms, to the death of Dr. Alonzo Clark, one of the greatest of New York teachers, who, he claimed, was just to all, supercilious to none, safe almost to plodding, and free from dogmatism; and who, as an honest toiler, with no meretricious aids, always gave what was best of his loyal nature to science and to truth. Avowing that there was no courtesy in science, he disclaimed all hero-worship, and earned, along with the best of his colleagues, the laurels of the ideal physician.

Dr. Shrady introduced his successor in office by a graceful reference to the verdict of the Scottish clans contending for precedence at a feast: "Where sits MacGregor, there is the head of the table."

The address of the President-elect was a thoughtful and carefully prepared essay devoted to reflections concerning the medical profession as a whole and physicians as individual members thereof, and the following extracts may serve to afford some idea of its character. The exact status which the profession holds in the complicated arrangement of human society is in some respects peculiar. The interests with which it deals are obviously second to none in importance. The most natural instinct of man is to preserve his health, and much of his time and attention, in one way or another, is expended in serving this object; and, notwithstanding his depraved inclinations and the tendency to excesses, it lies as a substratum in his moral nature, even though it may be dormant.

Although our relations with the community are close, and affect those matters which lead all others in importance, so far as this life is concerned, yet it is in a single line of duty; our points of contact with the world at large are few. We are to a certain extent a segregated class, and virtually constitute a caste; while most of the other higher pursuits in life bring their members more or less into the range of public notice, and the subjects which they agitate mingle to a considerable extent with the topics of public interest. A certain portion of the community, as individuals, certainly do manifest a desire to know something of medicine, and those with this inclination, whose temperaments are by nature tinctured with the element of vanity, occasionally pique themselves upon their scientific acquisitions. With a person of this description for the physician to acquit himself judiciously, serving the best interests of the patient and at the same time having the difficulties presented by a garrulous subject to deal with, is often a problem not easy of solution.

With many the vague and popular notions handed down from antiquity still hold their sway, with their admixture of mystery, superstition and deceit. The forms become somewhat modified under the progress of education and advance generally, but they still retain the root which belonged to their original type. It is only a change of dress suited to the fashion of the day. Higher in the scale of enlightenment comes he who does endeavor to mould his actions and discover his best interests by the judicious exercise of the light that is in him; but it is too frequently the case that one whose experience and judgment would enable him to successfully conduct a difficult mercantile project, or another who could apply the highest order of reasoning to a profound principle of law, cannot hold out against the assaults of promise, plausibility and pretence in seeking medical resources. There are others, again—and they do not belong to any particular station in life, nor do they always have the advantages of education or those associations which tend to enlarge the ideas—who, from an innate judiciousness, which they are able to exercise in all directions, in medicine as in other matters, think that the wisest course is to follow the dictates of common sense; and they therefore apply to those who, by education, training and experience are supposed to be qualified to attend to their medical needs. Were it not for these, who by the moral support and encouragement they afford,

do much to sustain him, the path of the physician would indeed be gloomy.

That the avenues to knowledge are open for all goes without saying; but a successful search for the choicest fruits is only accomplished upon certain conditions. It involves an intensity of interest and fixedness of purpose which falls little short of a devotion, and it calls for an amount of industry and self-denial such as only few can practice. He who cannot furnish these qualifications will reap as his harvest little but the results of a blasted or spurious germination. There is a vast difference between a knowledge that is ample, well-ordered, and in a condition ready to be applied with effect to a definite, useful purpose, and that which is the offspring of a few smattering, disconnected notions, of fancy, and of false intuition.

The arduous and responsible duties of a medical man in active practice call for some diversion from their wearing effects. There must be some resource by which the mind can occasionally be lifted from the weight which forces it in the embrace of an anxious contemplation; but it does not necessarily follow that the relief is to be sought for solely in light and frivolous entertainment. There are other channels which, in part at least, afford a means of obtaining the required relief; and even the pursuit of some study of a scientific or other character will often fulfil the demands of nature in this need. I do not claim that the practice of medicine is exceptional in presenting more troubles and vexations than is experienced in some other pursuits; but it will, I think, be conceded that there is no other in which the emotional faculties are more frequently exercised or strained to a higher degree. The amount of permanent damage to the nervous system that would occur in the application of the mental faculties over a considerable time—provided the capacity was proportioned to the magnitude of the daily effort required, and the application not begun at too early an age—would probably be small, if it was purely of an intellectual character; as is evidenced by the longevity and retention of the mental powers of those who devote their attention to philosophy, metaphysics, and the sciences generally. It would hardly be appropriate to this occasion to enter into any extended relation of the situations which exemplify the physician's anxieties; we know well what they are, and we all feel their weight. They vary, of course, with the exigencies of the case, but it may be safely asserted that there is no single professional act performed of which they constitute no part.

It is perhaps not out of place to say a word concerning the claims of medical societies upon its members; and in view of what has been alluded to in the necessity of the physician to have some diversion of his attention from the daily conflict with disease, this has a partial application. We might say that here is the home-circle of our professional brotherhood; here you can meet with those who have pursuits and sympathies in common. Whether you are fortunate enough to be distinguished or not, if you bring those attributes which belong to the worthy physician, you have the stamp of nobility, and the hand of fellowship is extended to you; while your efforts here will tend to round out and complete the professional character to its proper symmetrical proportions.

At a recent meeting of the Academy of Medicine Dr. Samuel Sexton introduced a resolution (which was unanimously adopted), endorsing the bill prepared by the State Charities Aid Association, in regard to the care of the pauper insane in State hospitals, and recommending its enactment by the Legislature.

In seconding the resolution, Dr. C. R. Agnew said that for thirty years he had been interested, with others, in the amelioration of the condition of the pauper insane in the State of New York, and that the first result of the agitation of this subject had been the establishment, by the State, of the admirable Willard Asylum. Later those at Binghamton and Poughkeepsie had been started. This opening of these institutions had withdrawn a considerable portion of the pauper insane from the county poor-houses; but now an effort was being made to establish local asylums for the insane in various counties.

The chief reasons alleged for this movement were the saving, to a considerable extent, of the cost of transportation of insane patients, and because it was claimed that the cost of maintenance in the State hospitals was unnecessarily great. One of the counties declared its willingness to undertake the care of its insane at a cost not to exceed 97 cents per head per week, and another for $1.19. At the Willard Asylum, where the number of inmates is now nearly two thousand, the expenses could not be reduced below $2.25 per head per week; but this included the best scientific care by expert physicians and specially trained nurses, the amusement and intellectual training of the patients, and their employment in the work-shop and on the farm connected with the institution. The counties, however, did not propose to give the same character of care to their pauper insane as that given by the State hospitals, as this was impossible of attainment for any county at a weekly cost *per capita* of $1.50, the charge to which the counties were subject by the provisions of the State Charities Aid Association bill. The expense of new or improved county buildings, and of a larger number and higher grade of attendants—to say nothing of maintenance and medical treatment—would impose a heavier burden on the tax-payer of the county than the additional increase of his State tax required to perfect the system already established by the State.

It was a fact, also—Dr. Agnew continued—that some of the counties had tried the experiment of having their own insane asylums, and unsuccessfully. Thus, Rockland county had erected one at an expenditure of $20,000, and it had now been abandoned. If the pauper insane were cared for by the counties they would be under the charge of the supervisors and superintendents of the poor, and these men, besides knowing nothing of the proper care of the insane, were altogether too close to the tax payers. This class of cases could, in fact, be properly

taken care of only in an institution where there was a board of managers which was directly responsible to the State, and where everything was done in the full blaze of public scrutiny; and in the State hospitals of New York he believed that the most enlightened modern treatment of the insane was carried out in as thorough a manner as was at present attainable. P. B. P.

MEDICAL SCIENCE.

Dear Sir:—If physicians would have the following or something similar published in the newspapers and popular press everywhere, they would greatly help to enlighten the people and diminish quackery of every kind:

There appears to be a great misapprehension existing respecting the character and scope of medical science. It does not consist of a single *pathy* or *ism*, or of many shreds of *pathies* and *isms*, but of all knowledge, all truth pertaining to life, health, disease, deformity, injury or abnormity of every kind, and their treatment, in their most extended relations. Hence, *pathies* and *isms* do not represent and have no place therein, while the real knowledge and truth included in every phase of thought, pathy, ism, or otherwise, belong to and are comprised in the general science of medicine, which is thus of universal compass. The application of the term "allopathy" to legitimate medicine is a misnomer and savors of quackery, while that of "allopathist" applied to the regular physician, which he repudiates, is libellous and actionable as expressive of an untruth, a stigma and reproach. The only pathy at all applicable to the science of medicine is anti-pathy, or antagonism to all disease; but even this is too limited and misleading as to its nature and extent, as it only includes the mere prevention and treatment of disease, and omits all the collateral branches of biological, and many of surgical science. This law of antagonism and principle of *counteraction* applies to curative medicine the same as to everything else, as it is uniform and universal, and does not admit of any exceptions, much less such a sophistical dogma as "*similia similibus curantur*," or like cures like of homœopathy. The dictum that to cure one disease it is necessary to produce another of the same kind or similar to the one existing, and then that this like stronger and conquering disease gets well of itself, which it must do if so as asserted, is sheer assumption and nonsense. The victim of one disease does not want, and should not be afflicted with another disease of any kind whatsoever, whether the same (isopathic), similar (homœopathic), or dissimilar (allopathic); but wants to get well in the most direct way as easily and speedily as possible, which it is the object of scientific medicine and physicians to accomplish by all the most appropriate physical, mental and moral means which can be favorably brought to bear upon the case by this law of antagonism with counteracting and antipathic agencies, of which mere drugs of themselves are often of minor importance, though generally useful and frequently indispensable. Yet, in general, alimentation is the basis of medication, and often of itself sufficient to cure as well as prevent disease, the regulation of the diet, with the other hygienic measures of pure air, light, heat, clothing, rest, exercise, mental and moral conditions, etc., according to circumstances, being necessary also in unison with this system of counteraction or *anti*-pathy, as right living is essential for the restoration as well as preservation of health. Therefore, for the removal as well as prevention of disease, with abnormities of all kinds, this law of antagonism prevails, as *anti*-pathy inculcates and *anti*-pathists adopt such measures as are counteractive to disease as well as every other derangement, whether of a physical, mental or moral nature, that will restore the equilibrium of health, consisting of anything and everything material, dynamical or spiritual, appropriate therefor, the precise character and combination of which depend upon the peculiarities of the case.

With regard to drugs alone, they are administered in every form, proportion, variety and way: crude or refined, single or multiple, separate or combined, small or large doses; each have their special application and are employed as necessary, the judgment of the physician deciding the particular kind, form, quantity, simple or complex nature and condition, whether organic or inorganic, mineral, vegetal or animal, solid, liquid or gaseous, and otherwise, singly or combined, specifically adapted antipathically to the case under treatment. But scientific physicians discard all exclusive dogmas, pathies and isms, as being too narrow and sometimes fallacious, though they counteract disease as well as abnormity of all other kinds by this sound, common-sense law of antagonism or *anti*-pathy, which may not always save life, just as carbonic acid and water against fire may not always save property; yet they are specific therefor nevertheless, assured that it is the only rational method and true system to cure as well as prevent disease; that the science of medicine is one and universal in its range and application, while ever progressive, new discoveries, new truths, new remedies and other instrumentalities being constantly added in its onward course towards perfection, despite all dogmas, pathies or isms. Thus, in the estimation of all true physicians,

> "No pent-up *dogma* restricts our powers,
> The boundless universe is ours."

GEO. J. ZIEGLER, M.D.

Philadelphia, Pa.

SYMPTOMATOLOGY OF TYPHOID FEVER.

Dear Sir:—In THE JOURNAL of January 28 your correspondent in Cincinnati describes the typhoid fever prevailing in that section, during the last summer, as differing in symptomatology from the fever described in text-books. The general run of the disease as it occurred here during the spring, summer and autumn of 1887 presented about the same symptoms as given in the article referred to. The temperature, always high at the beginning, 104°–105.5°, would either gradually decline to normal within the first ten days or, dropping to 102°–103°,

remain at this for one or two weeks. Headache and backache were the most prominent symptoms complained of by the patients, many tracing the latter directly to some exertion, and asking for relief from a "lame back." These symptoms were always accompanied by a general feeling of lassitude. During prevalence of the cold weather, both in spring and autumn, bronchitis was a common complication; hypostatic congestion of the lungs, however, occurred in only the most severe cases. For abdominal symptoms we had pain extending from the right iliac fossa, along the course of the colon, to the sigmoid flexure, with, in some cases, diffuse tenderness on pressure throughout the entire abdomen. Constipation was the rule, diarrhœa the exception; tympanites but seldom very marked. Intestinal hæmorrhages were few, but severe. As no post-mortems were held, ulceration of Peyer's patches could not be definitely established. Hæmorrhages of the nose were not often observed.

As to treatment of the cases, quinine, natr. salicyl., and antipyrin did not act satisfactorily in my hands, for, if given in doses large enough to depress the temperature, it would remain so only for a short time, returning to its original height in the course of ten or twelve hours, notwithstanding the constant administration of the antipyretic.

The remedy *par excellence* proved to be the ammonium salicyl., to which my attention was attracted by reading an account of the usefulness of this salt in typhoid and septic fevers, in the *Transactions of the State Medical Society of Wisconsin*, by Dr. J. R. Barnett, of Neenah, Wis. It invariably reduced the temperature to 99°–100°, keeping it there during the entire course of the disease, diminishing the rate and force of the pulse and causing, in a majority of cases, profuse diaphoresis. When given early, within the first few days of manifestation of the disease, it would generally break up an attack, the patient being able to be up and about the house in two or three days. In cases not seen until the end of the first or beginning of the second week, such drugs as were indicated were added to the am. salicyl. mixture. Tincture of digitalis, when the pulse was weak, was frequently given in 5-drop doses every two hours for ten or twelve days at a time to counteract the depressing action of the salicylate. Tr. opii was added in the few cases that were accompanied by diarrhœa. Bromide of potassium was always used in conjunction to combat the severe headache, and when the patients complained of pain and weight in the back part of the head and neck the fluid extract of ergot was used. The turpentine and opium mixture advised by Dr. N. S. Davis, without the opium, was given in all cases presenting a dry state of the tongue and sordes on the teeth.

I am unable to give an explanation of the action of this drug, but can say from experience gathered at the bedside, that it has proved itself to be a very efficient remedy in the treatment of this disease—shall we call it typhoid fever? Some undoubted cases of typhoid fever occurred during the time, but the general appearance of the disease was as described.

A remarkable circumstance I omitted to mention is that the skin was always hot and dry, except in the few cases of genuine fever above referred to, while our text-books claim it to be always moist and clammy. I did not keep an exact memorandum of any cases, but a few are well enough remembered to cite as giving an illustration of the prompt action of the ammonium salicylate:

Fr. G., æt. 21, German, laborer. Began to administer medicines to him on the ninth day of the fever at 7 P.M. Had a few days previous to this given directions about opening the bowels, and general instructions regarding the treatment, to his father, a German minister, who is a very devout disciple of electro-homœopathy. At the time mentioned the young man presented a woe-begone appearance, being well plastered with white, red and green electricity *à l'Électro-homœopathie* to relieve him of a distracting headache. His face was flushed, skin hot and dry, tongue covered with white fur, breathing accelerated, pulse hard and full, beating 120 per minute; temperature 105.2°. There was considerable tenderness along the course of the colon; bowels had been moved with mag. sulph.; the stools were watery, containing flakes of a yellow color. I placed him at once on a mixture containing am. salicyl. gr. viii, tr. aconiti gtt. i, pot. brom. gr. vi, ext. ergot fld. gtt. iii to each dose, with directions to administer the medicine every two hours during the night. Next day at 10 A.M. his temperature was 97.8°, his pulse soft and full, 96 per minute, he was perspiring freely and entirely free from headache. His bowels had not moved, and I ordered one tablespoonful of castor-oil to be given and repeated in three hours in case his bowels did not act. The dose of the mixture given above was reduced one-half and, as the tongue evinced a tendency to become dry, turpentine in 8-drop doses every four hours was prescribed. At my next visit, two days later, the patient was out of bed, and one week after this he did the chores about the barn. His temperature never rose to above normal after the first decline.

The other case occurred in February, 1887, before I had any knowledge of the value of the am. salicylate as an agent in the treatment of these fevers. This was a case of more than ordinary severity; one the books assign as usually terminating fatally, for the temperature ranged between 103.5° in the morning to 105.5° in the evening for about three weeks.

C. L., æt. 24, nat. Swede. The entire family, consisting of eight persons, went through a course of the fever. This patient was the last one to be attacked and proved the most severe. The abdominal and head symptoms were about the same as those described in the previous case, in the beginning of the fever, the stools and urine passing involuntarily about the third week, while an active delirium that set in during the latter part of the first week continued night and day for three weeks. The pulse was 120 during the day, running up as high as 140 during the night, while the temperature ranged between 103.5° and 105.5° for the same length of time. Quinine, salicyl. of soda, antipyrin (in horse doses, as the consulting surgeon expressed it), accompanied by moderate and cold effu-

sions, were each successively used, without ever reducing the temperature for more than 1° or 1.5° for longer than one to two hours. Every morning I would drive out expecting to find my patient dead, only to hear that he had passed a very bad night. Often I watched by his bedside all night not expecting him to live until morning.

I saw Dr. Barnett's paper after this patient had been under my care about three weeks, and procured some am. salicylate, which I began to administer in 15-grain doses every six hours, but not being satisfied with its action, the mode of administration was changed to 8 grains every two hours. Within eight hours the temperature began to fall, and although there was a temporary rise every evening, it reached normal at the end of the sixth day. He made a slow and tedious recovery, and it was fully eight months before he returned to work. During the course of the disease such remedies were administered at different times as the symptoms called for. I found the various formulæ of my honored teacher, Dr. N. S Davis, as given in his lectures, most excellent to combat the delirium; later on the involuntary discharges from the rectum and bladder and the dried and furred state of the tongue.

As your correspondent referred to at the beginning of this article, I also ask the question: What is the nature of this affection? He gives as a possible solution a contaminated water-supply, the streets having been torn up, and the water being below its usual level in the river; but here none of these causes can be found, for the fever occurred alike in city and country, visiting the settler in his log cabin in the midst of the pine forest, the farmer in the well cleared country, and the city dweller in the centre as well as in the outskirts of the city. The supply of drinking-water was derived at different places from the clear springs, running brooks, wells and the city hydrants, while there seemed to be no special influence at work, either as to the duration or severity of the disease. The rate of mortality at one time was quite large, rather more than the average percentage.

D. SAUERHERING, M.D.

Wausau, Wis., Feb. 14, 1888.

UNETHICAL USE OF PHYSICIANS' NAMES.

Dear Sir:—I have a little grievance to bring to your attention, and to that of the profession at large.

In October last, there came to Charleston, Messrs. Bernhardt and Matthez, "scientific opticians" from Chicago. Immediately upon their arrival here they visited all of the prominent physicians, explained that they were opticians—not oculists, nor did they interfere in any way with the oculist—and asked these physicians to give them their names in recommendation of their (the opticians') work, in order that they might publish them. Strange as it may seem, many of our most prominent physicians readily signed their names without knowing anything more of them than that they had good names of other men.

Before they could publish these names I succeeded in having a special meeting of the County Medical Society called, and stated my case. I said: "I am a specialist in diseases of the eye and ear, a member of the American Medical Association and of your Society; I observe the rules and abide by the Code of Ethics; yet you have given your names in recommendation to men entirely unknown to you, who are not physicians, who say they do not interfere in any way with the oculist, but whose actions and further admissions belie this, for they test the eyes and prescribe glasses for all who may come. The prescribing of glasses is known by many well-informed physicians to be a large factor in the practice of the oculist and one that requires the most careful attention; and yet these men are bold enough to say they do not interfere with the practice of the oculist. I consider that you have done me an injustice, and that when your names appear in the daily press recommending these men that my practice will be materially damaged, and my patients inclined to lose confidence in my ability."

Upon this statement the members of the Society present unanimously consented to withdraw their names, and so they were not used. Furthermore, these men do not hesitate to state publicly that Knapp, Agnew and Chisolm, not to speak of the lesser lights, know but little about prescribing glasses, and they tell persons who may have been treated by any of the above mentioned, that their eyes have been murdered, etc. Their charges for glasses are most exorbitant, ranging as high as $50 and perhaps more. One poor woman who consulted them afterwards came to me. Upon examination it was found that she had cataract in both eyes, and their combined vision was &c. Of course a glass would be practically useless. They advised glasses that would make her see and would cost *fifty dollars*, but if she wished her eyes *put out* to have them *operated* upon.

Now, my cause of complaint is as follows: Of course I cannot prevent their selling glasses, nor can I regulate their charges; but I do think it unkind and not strictly according to the Code of Ethics for physicians standing high in the profession, members of the American Medical Association, and Professors in regular colleges, to give their names for publication, thereby misleading the public and injuring the practice of professional brothers who are trying conscientiously to stem the rapid current. I enclose one of their advertisements which appears several times a week in each of the daily papers. The names therein are sufficient to bring these people practice. Very truly yours,

CHARLES W. KOLLOCK, M.D.

Charleston, S. C., Feb. 16, 1888.

CONGENITAL PHIMOSIS.

Dear Sir:—I find in THE JOURNAL of November 19, 1887, an article on "Congenital Phimosis," read before the Section on Diseases of Children at the thirty-eighth annual meeting of the Association, by Professor Wm. S. Stewart, of Philadelphia, in which he clearly sets forth the reflex manifestations resulting from this abnormal condition, as every careful surgeon of experience has met them, and as have as often been overlooked by the careless diagnostician,

with the result of failure in treatment; leaving the little patient to suffer and disappoint the expectations of over-confident and anxious parents. To overcome the difficulty he advocates dilatation instead of circumcision. Any means by which the abnormal condition can be removed successfully without a bloody operation, and comparatively painlessly, will be gladly received by the profession, and with delight by parents having children so afflicted.

But how a four-bladed instrument, of sufficient strength to accomplish the dilatation, can be thrust into an opening not larger than a pin's head, and dilate the parts without pain or blood, appears to me to be beyond the comprehension of the average surgeon; and an opening no larger than stated is often found. Dr. Stewart, however, very prudently cautions in using his instrument that it requires care not to get the blades into the urethral meatus; and also not to dilate too rapidly lest we tear the tissues and cause pain and bleeding. Consequently it will be necessary to dilate not only once or twice, but often, unless the tissues are torn, to overcome the difficulty, thus rendering the operation many times more painful and tedious than circumcision properly performed. I admit that circumcision as generally performed, is bloody, painful and tedious. But when properly performed it is very simple, comparatively bloodless, and attended with very little pain. In the ordinary method of operating it is necessary to stitch the mucous membrane to the skin after the removal of the redundant prepuce. But when properly performed the necessity for this part of the operation is avoided. All that is necessary, is to draw the prepuce well forward and clasp it pretty firmly between the blades of an ordinary dressing forceps, in front of the glands, then cut away all in front of the forceps either with scalpel or scissors, preferably the latter, remove the forceps and let the skin retract, then clip out of the mucous membrane over the glands a V-shaped piece up as far as the retracted skin. Apply antiseptic dressing and leave the case to nature, and it will give no further trouble, unless there be some inflammatory complication. But we are in no more danger from this complication than we are by dilatation, and from any view of the case circumcision is certainly preferable.

JAMES LAMB, M.D.

Aurora, Ind.

REMOVAL OF HYPERTROPHIED PHARYNGEAL TONSIL.

Dear Sir:—I have just seen an article in the JOURNAL of January 28, by Dr. H. Gradle, of Chicago, on "Hypertrophy of the Pharyngeal Tonsil," in which he describes various instruments for the removal of such growths. He makes no mention, however, nor do I see it mentioned in any work that I have consulted, of a simple device that has served me in several instances with much efficiency. I make use of one of Sims' sharp uterine curettes, the stem having been bent at a right angle about 1½ inches from the end. With the aid of a self-retaining uvula and palate retractor, which I also devised (*See N. Y. Medical Record*, Jan. 14, 1888), any portion of the posterior pharyngeal wall can be curetted away, or any small growth removed from the posterior nasal or naso-pharyngeal space with ease, Jarvis' curved snare being used for the larger growths. The uvula retractor referred to above has proved of especial efficiency in all such cases and particularly when very large posterior polipi are present, and where under any circumstances the use of the tape and clamp method would be objectionable, if not altogether impossible, but with the palate retractor the parts are easily pulled forward and held so while both hands of the operator remain free to use the mirror and snare or cautery wire.

W. PEYRE PORCHER, M.D.

Charleston, S. C., Feb. 6, 1888.

ASSOCIATION ITEMS.

ARRANGEMENTS FOR THE ANNUAL MEETING, MAY, 1888.

Members of the Association will be pleased to learn that the organization of the Committee of Arrangements for the entertainment of the American Medical Association in Cincinnati in May, has been completed, and that long strides have been taken towards securing for the Congress scientific work of high order and social features that will be at least acceptable. Dr. W. W. Dawson, the Chairman of the Committee, has associated with himself a number of representative medical men to aid him in the work of the Committee. To facilitate this work the following Sub-committees and Chairmen have been appointed.

Sub-committee.	*Chairman.*
1. Section-Work,	J. T. Whittaker.
2. Halls and Decoration,	B. Stanton.
3. Entertainments,	N. P. Dandridge.
4. Exhibits,	J. C. Culbertson.
5. Programme,	J. Ransohoff.
6. Reception,	J. T. Whittaker.
7. Finance,	S. C. Ayres.
8. Registration,	Jas. M. French.
9. Printing and Invitations,	J. C. Culbertson.
10. Transportation and Hotel,	Geo. Purviance.

Music Hall has been secured for the second week in May. Under its vast roof the various Sections of the Association can be easily accommodated. The seating capacity of the rooms for Section-Work varies from about 70 to 300. Their acoustic properties approach perfection.

By the advice of the Sub-committee on Section-Work, the following circular letter was addressed to the Chairmen of the several Sections, in answer to which a number of very satisfactory letters have already been received.

"In the endeavor to increase the interest in and concentrate the work of the special Sections, the Committee of Arrangements ventures to suggest to the Section Chairmen the advisability of selecting a special subject for consideration on the first and second days of the meetings of the various Sections, to be introduced by two, or at most, three papers and followed by general discussion; the remaining time to be occupied in the reading of other papers, presentation of specimens, exhibition of apparatus, etc.

"Should this suggestion be favorably received, the Committee begs an early response with specification of the subjects selected, names of referees to present the papers, and of members to open the discussions."

Two weeks ago a very largely attended meeting of the profession of this city was held at which vent was given to no little enthusiasm. Liberal subscriptions to the entertainment fund poured in, and in the evening it was established that the local profession would give their visiting colleagues a right royal welcome. Thus far but two entertainments have been positively decided upon. One, a grand concert at Music Hall, the other, a reception at the Art Museum, to be followed by a collation. As time progresses other entertainments will doubtless be provided.

The question that may prove a stumbling block in the way of the Committee is associated with the giving of the annual dinner. We cannot accommodate *more* than three hundred (300). Will that many take the ticket at seven dollars ($7.00) per plate? The "two kinds of tickets" clause of the mandatory resolution of the Association must be ignored on account of utter impracticability. Some of the members of the Committee are inclined to give up the idea of the banquet altogether. Others, however, are anxious to see it given, believing that if prominent men from the East and West were especially requested to attend, an excellent opportunity would be given those assembled at the board to bury past grievances, to dispel factional feeling, and in every way to strengthen the Association by restoring harmony.

JOSEPH RANSOHOFF,
Local Sec'y Com. of Arrangements.

SECTION ON MEDICAL JURISPRUDENCE. — The members that contemplate contributing Papers to the Section on Medical Jurisprudence of the American Medical Association, at the meeting in Cincinnati, May, 1888, are requested to forward the titles as soon as possible to the Chairman of the Section. The following have already been promised:

"Address by the Chairman of the Section," E. M. Reid, M.D., Baltimore.

"Paralytic States, their Relation to Testamentary Capacity," E. C. Spitzka, M.D., New York.

"Medical Jurisprudence in Relation to Wills," Richard Gundry, M.D., Baltimore.

"Expert Testimony in Medical Jurisprudence," Orpheus Everts, M.D., College Hill, O.

"Fœticide, its Increase and Inadequacy of Law for its Prevention and Punishment," H. C. Markham, M.D., Independence, Iowa.

"Some Phases of the Civil Laws in reference to the Development of Man," J. W. C. Cuddy, M.D., Baltimore.

"Some Points in the Medical Jurisprudence of Insanity," E. N. Brush, M.D., Philadelphia.

"The Medico-legal Relation of the Inebriate to Society," I. N. Quimby, M.D., Jersey City, N.J.

E. M. REID, M.D., Chairman.

Baltimore, Md.

NECROLOGY.

CHARLES M. DUNCAN, M.D.

Charles M. Duncan, M.D., was born in Dummerston, Vt., July 1, 1808; died October 4, 1884. He was the only son of Dr. Abel Duncan, who was emphatically "the beloved" and successful physician of his day in Southern Vermont.

Dr. Duncan's boyhood was largely spent on the farm with his mother, with the advantage of attending the public schools and an occasional term at the academy. His book, of which he was always fond, was his companion while engaged in farm work. This occupation was uncongenial, and he found no difficulty in making choice of a profession. Perhaps the desire to be like his father, whom he always heard spoken of as possessed of every manly virtue, aided him in his choice. He commenced his medical studies with Dr. Knapp, of Dummerston, attended lectures in Boston and Brunswick, Maine, taking his diploma at the latter place.

In 1834 he located in Shelburn, Mass. He waited patiently for his work as the young physician must wait, meanwhile gathering about him solid and lasting friends. In patient and self-sacrificing labor he laid the sure foundation for strong and enduring friendships in the hearts and homes of the people which few, in any profession, are so fortunate as to attain. He soon took his place among the leading men of the town, and was ever identified with its interests. For more than twenty years he served as town clerk and treasurer, and in general was sought not more as a physician than as a friend and counselor. He became a member of the American Medical Association in 1866. The community is to be congratulated that is served by so earnest, faithful and conscientious a physician, by such upright and unswerving integrity in its business interests, and by one who proved himself so tender-hearted and sympathizing a friend, for more than fifty years, as did the subject of this sketch. The action taken and resolutions passed by the Franklin Medical Society upon the death of Dr. Duncan were fitting, and may be seen in the *Boston Medical and Surgical Journal.*

L. D. S.

MISCELLANEOUS.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE U. S. MARINE HOSPITAL SERVICE FOR THE WEEK ENDING FEBRUARY 25, 1888.

P. A. Surgeon L. L. Williams, promoted and appointed P. A. Surgeon from February 10, 1888. February 23, 1888.

Asst. Surgeon J. O. Cobb, appointed an Asst. Surgeon February 21, 1888. Assigned to duty at Marine Hospital, Chicago, Ill. February 25, 1888.

Asst. Surgeon J. B. Stoner, appointed an Asst. Surgeon February 21, 1888. Assigned to duty at Marine Hospital, New York, N. Y. February 23, 1888.

Asst. Surgeon A. W. Condict, appointed an Asst. Surgeon February 11, 1888. Assigned to duty at Marine Hospital, Chicago, Ill. February 23, 1888.